JPRS-UEA-89-007
7 APRIL 1989

FOREIGN BROADCAST INFORMATION SERVICE

JPRS Report

Soviet Union

Economic Affairs

Soviet Union
Economic Affairs

JPRS-UEA-89-007 CONTENTS 7 APRIL 1989

ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

Abalkin Economic Report Presented to USSR Council of Ministers

18200248 Moscow PRAVITELSTVENNYY VESTNIK in Russian No 3, Feb 89 pp 3-4

[Report to USSR Council of Ministers as reported by Yu. Rytov and L. Chernenko: "The Government Seeks Advice From Science"]

[Text] Our economic system has been moving along the path of reform, but the search for the optimum route to the goal continues. This is taking place at government meetings, in scientific discussions and in daily practical economic work. Without this search, proceeding at different levels, no reliable solution will be worked out. It should be supported by the results of practical work, and by its scientific thinking, analysis and prognosis. True, sometimes scholars, in discussing the situation in the economic system, only take the pose of critics, without suggesting anything constructive. The press presents a broad spectrum of these evaluations, opinions and comments. In order to advance the reform, however, there must be specific proposals and an orderly and purposeful scientific concept.

We know that the strategic course toward consistent embodiment of an economic mechanism new in principle was determined at the June (1987) CPSU Central Committee Plenum. The new methods of economic activity have already passed a broad test in fact, and this year became the property of all the material production sectors. Their advantages are indisputable, and they have in many ways determined the positive changes noticed in the national economy. At the same time, implementation of the reform has also encountered considerable difficulties, and complex and unexpected problems have been revealed.

Just what, specifically, does science propose for their solution? The Institute of Economics of the USSR Academy of Sciences presented a report, "Proposals To Improve the Economic Reform Being Carried Out in the Country," which also became the topic for discussion at the meeting of the Presidium of the USSR Council of Ministers. Here were gathered members of the Presidium of the Council of Ministers, ministers and the leading economic scholars of the country.

N.I. Ryzhkov, chairman of the USSR Council of Ministers and member of the Politburo of the CPSU Central Committee, opened the meeting.

"Restructuring economic management," he said, "is taking a very complex path. In the last two or three years a great deal has been done: laws on the state enterprise, on cooperation and a number of other basic documents have been adopted and put into practice. There are no grounds for saying that we are standing still. There are, however, also no grounds for complacency. Implementation of economic reform has brought to light a number of disturbing, critical situations which had not previously been thoroughly enough worked out. The Presidium of the Council of Ministers is now doing well-grounded work on seeking solutions of a tactical nature, in order to stop negative processes, as well as on developing long-term measures to bring the economy into a thoroughly healthy state.

"We would like," emphasized the Chairman of the USSR Council of Ministers, "to have today's meeting make it possible to penetrate more deeply into our economic reform, and to learn the position of the scientific society on these problems and its evaluation of certain measures which are being carried out within the framework of the reform.

"Here the approach to the matter is particularly important and weighty. On the one hand, there can be no delay in carrying out the urgent measures to make the economic system healthy, and on the other hand, we should not outstrip events. We can see where our shortcomings are. It is necessary to move ahead without creating collisions, which could exacerbate the country's economic situation.

"The main purpose of our meeting is to exchange opinions, to discuss things and to see where we are making mistakes and where we are acting correctly. Today's conversation should help us to define more precisely the practical steps for a further improvement in economic reform."

Then L.I. Abalkin, director of the Institute of Economics of the USSR Academy of Sciences, academician, spoke. We are presenting the basic theses of his report.

"Originally the theoretical premises and recommendations worked out required more precise definition and correction in consideration of the course of fulfilling the plan for the 12th Five-Year Plan and the first steps of economic reform. On the whole it is being implemented slowly, half-heartedly and inconsistently. The transition of the enterprises and associations to full cost accounting and self-financing was not supported by restructuring in the true echelons of administration.

"The main direction for further development of fundamental reform is to expand its front and achieve wholeness in the changes being implemented. A lack of completeness (development of independence of the economic units with no change in the functions of the center; introducing economic methods while retaining the directive content of the state order; transition to full cost accounting while maintaining funded supply, etc.) and unified, purposeful directivity of the measures implemented constitutes the main reason holding back economic reform.

"The scientists of the institute connect the basic directions of emergence to a socially oriented, highly efficient economic system with the solution to two interrelated problems. In the first place, with transition to a new quality of economic growth, and in the second place, with completion of the formation of a new economic mechanism.

"First of all, however, we must turn to the primary problems of today. The present situation requires extreme measures to make the economic system healthy.

"What sort of structure is seen for this program? Here are its three basic goals: reducing the budget deficit, normalizing the monetary circulation in the country and stabilizing the consumer market. The measures should encompass all units of this system: the budget, credit system and finances of the enterprises. In addition, there must be special measures to balance the monetary incomes and expenditures of the population.

"The task can be presented as, in the course of three years, reducing the proportion of the budget in the national income from 72 percent to 55-60 percent, through reducing the volumes of centralized capital investments. Reducing the construction front would make possible a substantial improvement in material-technical provision for the objects remaining. Many other expenditures must also be removed from the budget, as they will be covered by the self-financing of the enterprises. Subsidies for unprofitable and low-profitable enterprises must also be eliminated, transferring them to cooperatives and to leasing—and we will obtain in the order of 20 billion rubles.

"The problem of reducing military expenditures requires special study. Reducing expenditures for administration can also bring a good saving. Reorientation of credit deposits for the needs of the consumer complex will give it accelerated development.

"Restructuring the credit system should also include the creation of a network of commercial banks, raising the level of interest rates and gradual abandoning of the use of a loan fund to cover a deficit.

"In connection with this, in the future the development of the reform will be divided into two stages.

"The first stage is making the economy healthy and introducing new methods of economic activity, encompassing approximately 5-7 years. During this time the conditions are to be created for introduction and efficient functioning of the new economic mechanism.

"Only after the economy is stabilized should the transition be made to the second stage of its improvement—the consistent evolution of economic reform, which will take from 1995 to the year 2000.

"In preparing for this stage, particular attention must be turned to the purposefulness of the political-economic vision of the problem. The critical nature of these problems often forces us to give priority to current tactical solutions over strategic ones.

"Take even the problem of transition to wholesale trade through means of production. It has no solution without restructuring the planning, without restructuring the budget policy, without changing the interrelations with the foreign market and without a new price system. In turn, it does not exist as an independent price problem. Until the total balance on the market is ensured, and until there is real competition between production facilities—the price formation reform will not yield the anticipated positive results, and can lead to stimulus of a new inflationary spiral.

"The principal basis for further development of the economic reform comes forth as enrichment of the forms of socialist property and radical updating of its inner content. Alienating the workers from property and management when they are not the real masters of production is one of the deepest and most dangerous deformations. The only property that can be acknowledged as socialist is that which serves as the property not only of everyone, but also of each worker, the labor collective and regional and other associations of workers.

"In analyzing the perspectives for the development of property, it must be taken into consideration that social progress goes not along the path of unification and uniformity, but along the path of complication of the forms of economic life in accordance with principle. Therefore, the entire specific multitude of types of socialist property cannot be established and regulated in advance. The main thing is to recognize the conformance to principle of the given process and not to change the development of the forms engendered by life.

"Historical experience convinces one, it was noted in the report, that not a single major radical reform is possible without certain losses. The precise social layers of society responsible for these losses are important, however. Above all, those who do not wish to work honestly and productively, who actually live on unearned funds, and enterprises that do not meet the social norms of efficient management should be made to pay. This position should find specific forms, including consistent development of cost accounting, elimination of unprofitable enterprises and production facilities and restructuring of the wage system.

"One of the most complex problems of transition to the new look of socialism is the combination of highly efficient economic activity, regulated on the basis of widescale development of economic methods of management, with consistent adherence to the principles of fairness and social protection for man. This is the absence of exploitation, provision of full employment for the population, a guarantee of a subsistence wage and

preservation of the ecological equilibrium. Adherence to these principles can maintain the growth of efficiency, if one regards the latter in the primitive way, in the narrowly economic sense. If, however, efficiency is understood in its original socio-economic meaning, then it is the work and living conditions of our generation and future ones that come forward as the determining indicators of the social structure.

"Bolder changes must be made in the administrative structure. In the opinion of the speaker, up to 45 percent of the entire production volume can fall to independent concerns and intersectorial state associations. Creating these concerns will make it possible to simplify a mass of intersectorial and intereconomic relations and will accelerate the technical and technological breakthrough."

Now follows the reply of N.I. Ryzhkov.

"A note presented by our institute, said: monopoly is stifling us. No one, however, can give a method of getting out of it. Merely to proclaim anti-monopolism—what will this yield? Transfer 50 percent of the national economy to large concerns and we will obtain such monopolism that they will dictate everything and everyone. Now we have only three MGO—two in Leningrad and one in Moscow. The Leningrad ones are already beginning to twist the customers around their little fingers. The one here is running around the Council of Ministers, around the Bureau: do the MGO a favor so that they will give us a generator."

L.I. Abalkin: "If the association seems monopolistic, on the domestic market it should be deprived of the right to set prices independently. Secondly: without an exit onto the world market, it is impossible to prevent monopoly.

"The most complex problem, arousing the stormiest discussions is the general orientation of economic growth and evaluation of the dynamics of its rates. From the standpoint of the speaker, orientation toward economic growth, measured by the product growth rates, was yesterday, the result of the extensive development of the economy and the reason for the imbalance of the national economy. We should have only two priorities in the 13th Five-Year Plan: the social one and conservation of resources."

N.I. Ryzhkov: "A great deal was said in the report about the new concept of growth rates. We are not for those rates that are made only for rates' sake. With precisely what new content, however, should they be filled?"

L.I. Abalkin: "There should be a rejection of rates that cannot fulfill the whole function. After all, the rates can be most varied: a reduction in expenditures, resource conservation and product updating. It is possible, for example, not to increase the production of machine tools, but to accelerate their updating. Whatever way the growth rates of a product are measured, with intensive development the growth rates in the achieving sectors should come to zero."

N.I. Ryzhkov: "When you speak of details, we understand you. The coal extraction rates must not climb for us, of gas extraction—perhaps must, and of oil—must. Perhaps, metal too must do less. We must advance, however. How should this path be measured?"

L.I. Abalkin: "If you are speaking of the 13th Five-Year Plan, there can remain only the indicators of the national income and the gross national product, on condition that they take on resource conservation and the GNP as well as the development of the social sphere. These indicators, however, should relate neither to the republic, nor to the sector nor to the enterprise: they serve as a guide line for the national economy as a whole."

The exchange of replies shows the sharpness of the discussion that took place at the Kremlin. We shall dwell only on a few of the most interesting questions and answers.

A.P. Biryukova, candidate member of the CPSU Central Committee Politburo, deputy chairman of the USSR Council of Ministers and chairman of the Bureau of the USSR Council of Ministers on Social Development: "The report says: no indicators are to be taken to the enterprises. In this case, however, how can the satisfaction of the people's needs be kept track of and ensured?"

L.I. Abalkin: "Given the present imbalance in incomes and expenditures, the situation has been incited to the point of turning back, to a command system. This variant is not excluded, because the levers of administration, released earlier, must again be brought back. Two or three years will be needed to make the economy healthy. During this time, pumping money into the national economy must above all cease. We should have only one shortage—money. Nothing else can be scarce: neither metal nor machine tools nor bread....

"If, however, we speak of the future, the main thing here is to intensify the social orientation of the economic system. Certain steps are being taken in this direction. Most of them, however, are directed toward overcoming the disproportions that have formed and toward eliminating the problems arising from yesterday. Further development cannot take the path of patching up the hole and throwing resources from one social problem to another even more neglected one.

"Comprehensive social programs must be drawn up, particularly programs of a radical change in content, and creation of work conditions worthy of a citizen of a socialist society, and ensuring the creative, intellectual nature of work and a rise in its prestige.

"The most complex restructuring, at the same time most decisive for historical judges, is the transition to economic growth on a balanced basis, eliminating shortage in all its forms and manifestations. This requires time, a radical breakup of the structures and proportions that have formed and tremendous efforts. The USSR Academy of Sciences could have been entrusted with working out the theoretical bases and mechanism of practical implementation of this transition."

Having completed his report, academician L.I. Abalkin left the platform. The discussion began, and also revealed many unexpected new opinions, recommendations and proposals.

Academician A.G. Aganbegyan: "There must be a special, extraordinary system of measures for good financial health. It is a system that is needed, not individual measures. Only a very strictly regulated system of measures could saturate the market with goods and eliminate shortages.

"What measures must be implemented? In the first place, change the wage fund regulating mechanism, by introducing progressive tax assessment into the wage increase fund. Other sources of uncontrolled growth of monetary income should also be closed. In the second place, the range of services to the population must be expanded. For example, housing could be sold to the people. Many people would probably wish to improve their housing conditions even at the cost of their own funds.

"There should be a considerable reduction in production capital investments, and a 'revision' of our largest construction projects should be made. After all, we are in no way constructing according to our funds. At the same time, some of the money freed could be utilized in housing construction.

"We must put into practice programs to produce objects for long term use. The output of passenger vehicles, suites of furniture, refrigerators, videotape recorders and other things that could be produced on certified loan, giving the right to purchase a certain specific object, should be considerably expanded.

"Finally, advantages must be created for production of consumer goods. It must be advantageous for heavy industry enterprises to sharply increase the output of these goods. For this they must above all be provided with resources and begin wholesale trading with them. The norms for profit withholding must also be determined.

"The question of reforming retail prices must be withdrawn from now until the market is saturated with goods. The people should be assured that if a certain object cannot be bought today, it can be tomorrow. A very strict regimen of economy must also be introduced.

"Tax assessment also needs improving. The population would approve the introduction of progressive tax from their earnings. Tax introduced on cooperatives must not be prohibitive. They must be given the opportunity to develop and expand production, particularly where this is related to satisfaction of demand. Excess housing area must be taxed—these proposals come from the population.

"Commercial trade in goods of higher quality can be introduced, with the best sales clerks and the best stores singled out for this."

Academician G.A. Arbatov: "The main thing now is to work out urgent measures. One of them is to take out loans, not to purchase equipment which can then become frozen in long-term construction, but for widely used consumer goods.

"There is a reserve, such as reducing military expenditures. This problem exists in the United States as well, where there is also a need for conversion of military production. There are great potentials here for combined work."

Academician O.T. Bogomolov: "A viewpoint exists among us which is shared by many economists—that restructuring should always be accompanied by difficulties at the initial stage. World experience indicates that this is not always so. Let us say, in China there were no great difficulties at the beginning of restructuring. Hungary, which began restructuring in 1957, quite rapidly achieved definite progress in agriculture.

"We, unfortunately, underestimate the possibilities hidden in the restructuring of agrarian relations. If we speak of the concept of reform, it must be carried out primarily in agriculture. Unless we reject administrative methods in this sphere, we will continue to experience difficulties. After all, no problems can be solved without rejecting major grain import.

"The economic solution is: lease contracting and cooperatives. We must realize how the old forms are inhibiting our development, and renounce them. Unless, however, we eliminate bureaucratic impediments and build up market relations, we will hardly obtain the proper effect. The role of the market should be correctly evaluated. Without it, many of our proposals to combat inflation will not be realized.

"I do not, however, support the proposals heard here that consumer goods can be imported through loans. We should be taught by the experience of countries that have fallen into a long-term trap this way. Loans are very expensive now, and must be taken out cautiously. It is more correct to draw in capital to create joint ventures."

Academician S.A. Sitaryan, first deputy chairman of USSR Gosplan: "Science should have more definite standpoints on the problems being discussed here. The

proposed measures must be thoroughly weighed and reweighed. They should be approached not only on the basis of the need for a spur-of-the-moment solution to the problems that have accumulated, but also from the standpoint of the future. It should be calculated, let us say, so that we do not have to discuss these problems again in two years time. Science should deliberately and calmly evaluate the possible consequences of the measures proposed.

"The second problem consists of extreme measures and reform. Some people here have said that such measures should contribute to implementation of the reform. I have occasion to be greatly concerned in this question. It turns out that these measures cannot put reform in its best aspect. Evaluation of the perspectives of the proposed measures from the scientific standpoint should above all be more fundamental, because science is more capable of objective analysis, and not be based on the emotional perception of certain specific problems.

"In order to propose the correct set of measures for the near future and for the long-term future, the situation and reasons for the difficulties that have been formed must be correctly evaluated.

"We must not, for example, state that up to 1985 everything was going well with our economic system, and then everything went awry. This is an obvious state of well-being, concealing deep disproportions behind it.

"Indeed, we have recently taken steps which weighted down the economy, but they were leading toward safeguarding the reform. Therefore, finding ourselves in a budgetary hold-up, we undertook actions which were not performed earlier, even when the budget was overfulfilled. This five-year plan, for example, is the first five-year plan in which not a single item in the social program was cut. Moreover, we added funds for the social program. All this has also created certain complexities.

"Naturally, the reform is in many ways proceeding with difficulty. Everyone must bear responsibility for this matter, however. Along the entire series of extremely important directions for the reform, its scientific guarantee is lagging behind. I should say that for items such as leasing, territorial cost accounting, tax assessment, a second form of cost accounting, the cooperative movement at the first stage, and a number of others, there is a certain scientific stockpile, but for serious, expanded, fundamental work, even for the initial period—there is none. This is worth thinking about. Economic science must be activated in these directions. From my standpoint, the barometer of this activation is the 'splash' of young scientific personnel. There was a 'splash' of this sort in 1965-1970. Several years have passed since the beginning of our reform, and so far I can see no outstanding names.

"There is one more problem. We should present with complete clarity the fact that the transition from administrative methods to economic ones is related to the appearance of a number of new phenomena, problems and situations. We are trying in many ways to evaluate them from the standpoint of the administrative-command system. We must find new instruments. While right now it is a question of taking extreme measures, they must be thoroughly weighed. This is because, having solved one class of problems, in two to three years we may run into just as many difficulties."

Academician V.N. Kudryavtsev, vice-president of the USSR Academy of Sciences: "The very fact of the meeting is important. The members of the Presidium of the Council of Ministers have seen that certain concepts and several programs exist and can be put into practice. The measures were proposed correctly, but of course there are no all-purpose means of solving today's problems.

"A special group, made up of scholars and practical workers, must be created. What was said by academicians L.I. Abalkin, A.G. Aganbegyan, G.A. Arbatov and O.T. Bogomolov coincides, for all the differences. This coinciding is not random—these people have different points of view, but they all arrive at the same place.

"The directions of the research being performed at the economic institutes must be more closely related to what our national economy needs today, which is the concern of the government. We mentioned 15 institutes here, but they are still working in an uncoordinated manner. Purposeful coordination of their forces is needed.

"Our scientific collectives also need a direct and precise social order. The economic sphere has this experience, but it must be developed.

"The guarantee of the economic reform must be intensified and legally ensured. This means drawing up laws on property, on leasing, items on the state order and on tax assessment. The need has grown urgent for working out a program, calculated for several years, on legal guarantee of fundamental reform."

Yu.D. Maslyukov, candidate member of the CPSU Politburo, first deputy chairman of the USSR Council of Ministers and chairman of USSR Gosplan: "The Institute of Economics has presented us with a multi-faceted, comprehensive report. Such a profound document did not exist before. In analyzing it, however, the thought involuntarily comes to mind that too many cooks spoil the broth. The point is that the reform being carried out has insufficient scientific safeguarding. Let us recall the reform of 1965—it had the powerful support of science. How did all of science greet it! How were all the problems solved, how did its propaganda go!

"Something is unclear to me today: science is inflicting serious blows on reform. Why is this necessary? If reform suffers from halfheartedness, if it is weak, let us think together about what to do to correct the situation. But indeed, is it really this way? If, with all this, you are still advocates of reform, then carry it out.

"Let us examine what reform has given us. The results will be mainly positive. We have actually made the people engage in cost accounting, and the workers have understood what it is. We have opened forms of production relations of which no one would have dreamed three years ago. We have changed the people's psychology. Let us seriously analyze the positive and the negative in the reform.

"While converting 60 percent of industry to the new conditions of economic activity, at the same time, we failed to avoid a number of errors. Both Gosplan and science are equally guilty of this. With the transition to cost accounting of the rest of the enterprises, we had already taken all this into account and had made the necessary decisions. Now, in thinking over the nature of the extraordinary measures, we must proceed to this, but under the flag of implementing reform.

"Scholars could be of more serious help. Combined work must be set up, not only to give alternative evaluations and to take the position of a dispassionate critic, but to act jointly. Today we could understand each other better. If we join the forces of our departments and science, it will be only beneficial."

The discussion of the report lasted eight hours. Members of the Presidium of the USSR Council of Ministers, ministers and scholars gave their opinions on the "painful" points of our economic system and effective ways to develop it.

N.I. Ryzhkov gave the concluding remarks: "We have had a very useful exchange of opinions. Expressed here were the points of view of scholars on the processes taking place in the economy and, most important, in what direction we are going, where we are acting correctly and where we are making mistakes. This conversation is also useful to the state organs which are working out a new economic mechanism for the country, and for our academic institutes and leading scholars. This is necessary, so that the points of view of scholars and practical workers are known to each other. This is mutually enriching.

"Of course, it must not be expected that at this meeting we can encompass all the problems that have accumulated in the economy at this time. Economic reform is really difficult to implement. When the developments were made, there were experiments in which an expanded concept of economic reform was formed, and when we looked more optimistically at the process of converting individual units of the national economy to the new conditions. We thought that the matter would go much more easily and that experience would be accumulated for all. In reality, the factor of the scale of the economy played its role. What was applicable for some ministries, when introduced on a large-scale, yielded different results. I think that there were certain reasons for this. Beneficial conditions were created for the economic experiments, and therefore they could not be mechanical and bring the same results to the entire national economy which were achieved, for example, by the five ministries where an experimental test of the new economic mechanism took place.

"I think that we must not dramatize the situation today. We actually find ourselves in a complicated position, but there is every possibility of putting it right and following the general course which was outlined in the party and government resolutions. We must realize that the reform is actually going along an unexplored path. Each year is a series of searches, discussions, studies, exchange of opinions and accumulation of a certain amount of experience.

"It is agreed that the reform could begin with agriculture. So far, until order is put into the rural area, until the dynamic processes are in progress which will make it possible to solve the food problem, it will be difficult to carry out the economic system as a whole. All these variants must, however, be approached very seriously.

"All the same, let us look objectively at all the processes. Many suggest taking out loans for consumer goods. Of course, what is as easy as to buy goods and immediately saturate the market. But how long can you hold out on this? After all, if you now go to large loans, in two years we will be operating on credit. If we live only for today, an approach of this sort would be justified. If we are concerned about the future, however, we cannot permit crossing a dangerous line. These processes must be very precisely understood. We can see mistakes and we can see the processes which have to a certain extent gone out of control. In so far as necessary measures are concerned, the government is now studying them in earnest, and the appropriate decisions will be made. The most important thing, however, is to hold the strategic line and not to depart from it. In taking certain tactical steps, we should not retreat from the general line. If we retreat from it, we will damage the economic reform. We must look ahead to see what will happen in a year, two years, five years.

"I think that we would have fewer shortages and uncompleted work if we actually had scientific developments on time. We do not have enough of them. The report presented today must be hailed. It expresses a definite concept, and the view of science on various problems. You do not always need detailed reports; it is important to work out a concept in principle. The merit of this report lies in the fact that it (you may agree or disagree with its individual theses) gives a definite concept of the further restructuring of the economic mechanism. Academic science should advance more proposals and implement more specific activities. The Presidium of the

Academy of Sciences must analyze the activity of all the academic institutes specializing in economics. We know about the business of only a few institutes. This is unfinished work. The potential of the institutes should be fully utilized and they should take an active stand. The time has come," said N.I. Ryzhkov in conclusion, "when we must consolidate the forces of our economic organs and the scientific community and the economic workers."

The Presidium of the USSR Council of Ministers noted that the exchange of opinions held was useful and fruitful. It must be said that for many of the questions which were raised in the report and in the course of its discussion, the government is already preparing and working out solutions. After giving a favorable evaluation on the whole, work was done by the Institute of Economics on forming the concept of further intensification of economic reform. The Presidium of the USSR Council of Ministers, however, did not agree with a number of the conclusions contained in the report, especially those pertaining to evaluation of the course of implementing the reform and the reasons for the arising of certain negative phenomena noted in the social-economic development of the country. Some proposals made by the institute were insufficiently argued and do not properly take into consideration the state of affairs in the national economy.

One more important conclusion ensued from this. Fundamental economic science does not devote the proper attention to problems of a scientific guarantee of economic reform. The central economic organs, ministries and departments of the USSR, in turn, are poorly supported by the potential of economic science existing in the country and are by no means always receptive to their proposals and recommendations.

The Presidium of the USSR Council of Ministers has stipulated a number of concrete measures ensuring the necessary interaction between science and practical work. The measures will undoubtedly contribute to more efficient implementation of economic reform.

The council of the government and the scholars expanded into a creative discussion, in which various points of view were expressed and a heated argument and search for specific steps took place. The very fact of such a meeting is a bright sign of our times, evidence of the living breath of restructuring.

The exchange of opinions carried on also made possible objective analysis of the processes taking place in the national economy, deeper thought about the course of economic reform and the perspectives for its further development and outline of the approaches to overcoming the difficulties and solving the problems emphasized in accordance with the strategic course worked out by the party.

Second Economic Model Discussed

Changes Proposed

18200144a Moscow PLANOVOYE KHOZYAYSTVO in Russian No 12, Dec 88 (signed to press 22 Nov 88) pp 68-71

[Article by A. Lavrentyev, deputy chief of the Main Economic Administration of USSR Ministry of the Electrical Equipment Industry: "Second Form: Possibilities, Problems and Paths of Development"]

[Text] The enterprises and associations of USSR Minelektrotekhprom [Ministry of the Electrical Equipment Industry] converted over to complete cost accounting and self-financing in early 1988. The majority of them have selected the first cost accounting model, which is based upon a normative distribution of profit. At the same time, 40 enterprises and associations (15.8 percent of their overall number) engaged in the production of 20 percent of the branch's output volume, and 10 scientific organizations, have commenced operations using the second model. It is based upon a normative distribution of income and foresees the formation of income at an enterprise in the form of the difference between earnings from the sale of products (work and services) and the material (or equivalent) expenditures. Based upon this income, computations are carried out with the state budget and the ministry and funds for production and social development and a unified wage fund are formed. The resources of the latter are determined using the normative-residual method following all of the above-mentioned computations. Such a system links income directly with the wage fund and motivates an enterprise into reducing its material expenditures, thus realizing the requirement expressed during the 27th CPSU Congress for a direct link between the size of the wage fund for enterprises and the income from the sale of their products.

Whereas in the case of the first model a wage is conditioned completely by the volume of normative-net output and in terms of its character appears as an element of expenditure, for the second model it is dependent upon the demand for the products and their quality and the solvency of the customers, that is, the risk factor is included and this limits the number of enterprises which selected this form of cost accounting.

The conversion over to the second model required a tremendous amount of intensive preparatory work. It was necessary to orient all of the subunits of enterprises towards achieving higher final results and to create an intra-organizational mechanism which would make it possible to form the wage fund for subunits (departments, sectors), while taking into account their contribution to the cost accounting income of the enterprise. The vitality of the mentioned model depends entirely upon the establishment of intra-production cost accounting and thus enterprises where this problem was resolved converted over to it. Included among them were the

Pskovelektromash NPO [scientific production association], the Kharkov Ukrelektromash PO [production association], the Saransk Elektrovypryamitel PO, the Zaporozhye Preobrazovatel PO and others.

The second cost accounting model makes it possible to realize one of the goals of the economic reform—to create an active anti-expenditure mechanism at the level of the principal production element: to carry out the principle "From each according to his ability, to each according to the final work result"; to eliminate wage-levelling and parasitism in the various forms in which they are manifested; to ensure unity of plant and intraplant cost accounting; to imbue cost accounting principles in each member of a work collective; to motivate all members of a work collective into analyzing the economic and financial status of their enterprise. All of the mentioned factors can be viewed as indisputable advantages of the mentioned model.

In addition, there are also the specific results. For example, enterprises which selected the second cost accounting model increased their output production volumes by 11.5 percent and labor productivity by 10.6 per cent during 9 months of the current year, while those which operated on the basis of the first model—7.4 and 8.8 percent respectively. For the branch as a whole, the entire increase in production volume was obtained by raising labor productivity, with the number of industrial-production personnel declining by 8,600 individuals.

The savings realized from reducing material expenditures at enterprises which employ the normative method for income distribution amounted to 30 million rubles during the first half of the current year, or 2 kopecks per ruble of product produced. This was 33 percent higher than that for enterprises which employ the normative method for distributing profit (1.5 kopecks). For the ministry as a whole, material expenditures were reduced by 2.6 percent compared to the level for last year, with the figure for enterprises which operate on the basis of the second model being 3.8 percent. The plan for 9 months of 1988 for profit was over-fulfilled by enterprises of the corresponding group only by 0.5 percent (with the plan not being fulfilled by 42.4 percent of the enterprises) and for income—by 5.9 percent (2.1 percent). The latter are steadily fulfilling their obligations for payments into the state budget and for withholdings for the centralized funds of the ministry. Compared to the level for 9 months of 1987, their unified wage fund per worker increased by 7.9 percent and for enterprises which employ the first cost accounting model—by 4.5 percent. They achieved their best results in fulfilling their obligations to customers, which amounted to 98.7 percent during the January to September period of this year, or 2.2 points higher than that for the remaining enterprises of the branch. Moreover, three fourths of the enterprises which operate on the basis of the second model carry out their deliveries fully (during the same period for last year—only by one half). Compared to last year, the volume of undelivered products declined for this group of enterprises by 52.3 percent.

At the same time, a number of problems of an organizational and methodological nature came to light during use of the second cost accounting model. Actually, the problems concerned with its use are examined as a rule by the central economic organs from the standpoint of the first model or by its adaptation to existing instructions and statutes. This applies to planning, the carrying out of bookkeeping operations, calculating production expenses per unit of output and others. As a result, enterprises which use the normative method for distributing income were forced to develop draft plans for those sections, forms and indicators which have no bearing upon their work (planning of labor and wages[1], production costs, profit and others). They also provide effective statistical accountability on the basis of all indicators, regardless of whether or not they describe the latter true economic processes taking place in connection with the second model. Conservatism and adherence to dogmas and stereotypes in bookkeeping matters are especially alarming.

Thus the task of creating an anti-expenditure mechanism at the level of the principal production element cannot be solved if, during its formation and introduction, normative documents which were issued earlier are "retained," their stability remains and an attempt is made to "arrange" them according to the second cost accounting model.

In the decisions handed down during the July (1988) Plenum of the CC CPSU, emphasis was placed upon the need for increasing interest in use of the second cost accounting model. Towards this end, USSR Minelektrotekhprom developed a new concept for the second model based upon more stern principles for the formation of income. Its introduction is planned for next year. This concept includes: the definition of income as the difference between earnings from the sale of products (work and services) for all types of activity and paid materials, computed amortization deductions; a conversion over from a system of payments for resources to the taxation of income, with mandatory observation of the objectively permissible limit for directing income into the state budget and ministry; the active use of a system of privileges (for example, tax, preferred access to credit and others); the presentation to enterprises of the right to establish independently the norms for the distribution of cost accounting income; a substantial change in and simplification of bookkeeping in connection with the formation and use of income, the formation of production expenses and others; the use of wage systems independently developed by enterprises; the development and use of a reduced number of statistical reporting forms; the use of USSR bank credits on a guarantee basis.

The mentioned concept makes it possible to create an objective economic mechanism that allows all achievements and all changes for the worse in the work of enterprises to be reflected in their income. In particular, this mechanism automatically penalizes any attempt to have as many reserves of commodity stocks as possible[2].

The relationships of enterprises with the state budget and a higher organization will be developed on an income tax basis. The experience of more than 20 years of use of payments for producer goods underscores the fact that the effectiveness of their use is not raised but rather it declines. The introduction of the mentioned payment, similar to payments for other resources, reflects an intensification in fiscal function. And as a result—weak interest of the financial system in the final operational results of enterprises and its concern only for budgetary problems.

When developing economic regulators in the form of income taxes, it is our opinion that a preference should be shown for their stimulating function. In particular, one should take into account such an important income tax requirement as observance of the objectively permissible limits for their assignment to the state budget or to a higher organ. In the event of an excessive withdrawal of income (above a defined limit), there is a decrease in stimulating motives among enterprises which are performing well and this tends to neutralize their desire to raise production efficiency. Certainly, during the remaining years of the current five-year plan, some enterprises will have to develop individual income taxes based upon the tasks and computations of the approved five-year plan. The income tax rates for the 13th Five-Year Plan will be unified.

In addition, a system of tax benefits will be introduced for the purpose of stimulating the accelerated revival of output and the production apparatus, developing export potential, raising the interest of enterprises in using resources from the fund for scientific-technical and social development for financing the technical re-equipping, modernization and expansion of existing production operations, for carrying out scientific-research and experimental-design work and production preparation, for observing the social guarantees for members of work collectives and others. It includes a program for accelerated amortization for individual types (groups) of equipment and tax deductions in the amount: 15 percent of the value of the fixed industrial-productive capital placed in operation, consisting mainly of new equipment of extended use (investment tax credit); 30 percent—of the expenses for NIOKR [scientific research and experimental design work], production preparation for new products (tax credit for NIOKR); 10 percent—of export receipts for the sale of products at prices computed in Soviet rubles; 100 percent of income: from the introduction of inventions (during the first 2 months of their use), newly introduced enterprises for the normative period required for developing them, additional wages for work performed at enterprises in regions of the Far North, the Far East and other equivalent regions (territorial tax deduction), income-dividend (obtained on the basis of released and acquired shares), income used for philanthropic purposes (Soviet fund for culture, Soviet childrens' fund and others), 100 percent of the fixed capital introduced for protecting the environment.

Thus the cost accounting income of an enterprise is becoming an object for its independent economic regulation. The economic norms for the formation of the financial risk fund and the fund for scientific-technical and social development will be developed and approved by the enterprises. The feasibility of creating a risk fund and its amount are determined by the work collective itself. The resources of the mentioned fund can be used for any purposes associated with compensation for damages or overlooked profit, with production and social development and others, including for wages in the event of financial difficulties arising at an enterprise.

The new concept of the second model calls for distribution of the resources of a single wage fund by the council of the work collective, jointly with the administration, based upon the complicated nature of the work and the degree of participation by each structural subunit (department, sector and others) in the final operational results of the enterprise. The wage for a specific worker (including management) is paid out on the basis of a system developed at the enterprise itself and approved during a general meeting of the work collective. This must exclude the possibility of a payment being made on the basis of just one visit to a work position. Each member of a work collective is only guaranteed normal working conditions and not his earnings.

The mentioned recommendations for further developing and strengthening the second cost accounting model are making it possible to create an economic model equivalent to that used in cooperatives and for lease forms of labor organization and a strong financial base for the further production and social development of enterprises.

Footnotes

1. The approach for such an economic category as wages changes generally within the framework of the second model: the funds for wages appear as the result of a normative-residual distribution of income, while at the same time it is an element of expenditure for the first model (that predetermines the possibility of their separation from the final operational results of an enterprise, department or sector). Thus use of the category of wages in planning and accounting for the second model is in conflict with the very essence of the mentioned form for cost accounting.

2. Experience has shown that enterprises which employ the second cost accounting model also have above-normative supplies of raw materials, other materials and

so forth, with a tendency towards growth in these materials being observed. A certain reduction takes place in the turnover rate for resources. Under the conditions planned, such work by enterprises is reflected directly in income intended for wages.

Advantages Cited

18200144a Moscow PLANOVOYE KHOZYAYSTVO in Russian No 12, Dec 88 (signed to press 22 Nov 88) pp 72-73

[Article by A. Lyapukin, deputy general director for economics of the Saransk Elektrovypryamitel Production Association: "Why Was the Second Form Selected?"]

[Text] The association started using the second cost accounting model at the beginning of this year. Many difficulties arose which were associated with a breakdown in the existing system for planning, accounting and reporting.

Why was the second model selected? It is not easy to furnish an answer for this question. Initially we weighed the "pros" and "cons" for both models. In particular, a comparative analysis of the association's work during 1987 was carried out and we noted that if the second cost accounting model had been in use at that time the collective's wage fund would have been short by 1.5 million rubles. It would appear that this was an argument against using the second model. But we went further in our analysis. Earlier the size of the wage fund was determined according to the norm for the NChP volume and this stimulated fulfillment of the volume indicators at any cost, regardless of the expenditures. The question might well be asked: What kind of cost accounting is this? Is it possible that a genuine master at his work operated in this manner? The second model conforms fully to the principles of cost accounting, since the wage fund and the fund for production and social development are directly dependent upon the amount of income obtained. True, here the degree of economic risk is immeasurably greater, since there is no possibility of operating at a loss and paying the collective its wages in a punctual manner.

One of the goals in restructuring the economic administration is that of creating an anti-expenditure mechanism. In order for it to operate in a reliable manner, each worker must be interested in achieving a maximum reduction in all types of expenditures. But in the case of the first model, wages constitute a considerable item of expenditure. It is scarcely possible to interest a worker in lowering his own wages. A mechanism based upon such a doubtful principle will not work. The enterprises will strive (and this is borne out by operational practice) to increase their wage funds by increasing the volumes of costly and material-intensive operations, while displaying no interest in realizing a savings, since the collective is far more interested in its wages than it is in payments from the material incentive fund. Thus it is our opinion that it is impossible to create a reliably operating anti-expenditure mechanism based upon use of the first cost accounting model. Distinct from the first, the second cost accounting model solves this task completely. When it is used for obtaining a maximum amount of income and, it follows, for lowering all material expenditures, interest is displayed by the state, the collective and by each worker.

The question concerning selection of one of the two cost accounting models also has an important social aspect, since one particular indicator, namely that of wages, exerts a considerable if not decisive influence on the formation of an individual's psychology. If wages represent a portion of the income obtained (second model) and its amount is dependent not only upon the specific contribution by a particular worker but also upon the final results of the entire collective, then it instills in an individual a sense of responsibility for the overall program, a sense of being in charge. And conversely, when wages are viewed as a measure of time expended, almost independently of the final results, then the psychology of a day laborer is formed.

There is still one other consideration which tends to favor the second model. Last year the association's material incentive fund amounted to 11 percent of the total amount of profit. Consequently, if a brigade has saved 100 rubles worth of materials, it will receive only 11 rubles and then only after several months have elapsed. Over this period of time, the workers will have forgotten where this money came from and the reason why they were awarded the incentive. The situation is different at the present time. The wage fund constitutes 50 percent of the income, the money from which is paid out during the same month. That is, the brigade will now receive not 11 but rather 50 rubles and immediately following the moment at which the savings was realized. Is it necessary to prove that the educational effect of the incentive in this instance is much stronger?

The collective was guided by such considerations when it made the decision to operate on the basis of the second cost accounting model. And life has confirmed the correctness of our selection. During 9 months of 1988, labor productivity in the association increased by 14 percent and the income per worker was 10 percent more than in 1987. Contractual deliveries were carried out completely.

Intraorganizational accounting has been reorganized and is now also based upon a normative distribution of income. The structural subunits have been divided up into eight groups: principal departments and production operations, auxiliary departments and their services, design-technological subunits, commercial service, subunits for supporting and servicing production, the service for technical control and quality, subunits for technical

re-equipping and capital construction and plant management. They all operate in behalf of carrying out their plans for orders and contracts in the interest of achieving the final results.

By way of an example, let us examine the formation and distribution of cost accounting income in Assembly Shop No. 19. The shop's production volume for marketable products, in intra-plant prices, amounted to 9,940,000 rubles and its material and equivalent expenditures, including amortization deductions and withholdings for social insurance—5,384,000 rubles. In all, the shop's gross income amounted to 4,556,000 rubles. Of this overall total, the following amounts were transferred for deliveries in accordance with internal cooperation: to the procurement shop for semi-finished goods and parts—976,000 rubles, to the tool shop for press moulds and dies in response to orders—387,000 rubles, to the design shop for services in connection with author supervision—141,000 rubles, to the logistical supply department for services associated with support in the form of material resources—98,000 rubles, to the computer center—113,000 rubles, to the department for technical control—279,000 rubles and for plant management—105,000 rubles. As a result, the computed income of the shop amounted to 2,457,000 rubles. Of this amount, 200,000 rubles were withheld for payments into the funds and 280,000 rubles were paid out for labor resources. The remaining amount came to 1,977,000 rubles and represents the shop's cost accounting income. To this amount we added a carry-over balance of 12,000 rubles from mutual claims and fines and we divided the total amount into the social development fund—40,000 and the wage fund—1,949,000 rubles.

Such was our experience.

Problems Remain

18200144a Moscow PLANOVOYE KHOZYAYSTVO in Russian No 12, Dec 88 (signed to press 22 Nov 88) pp73-75

[Article by G. Grigoryev, chief bookkeeper at the Pskovelektromash NPO: "What Has Experience Shown?"]

[Text] Since 1 January 1988, our collective has been operating under cost accounting conditions based upon a normative distribution of income, that is, using the second model. Its principles: wages—income and not expenditures; legal and economic independence of an enterprise.

When converting the NPO [scientific production association] over to complete cost accounting, self-financing and self-recoupment, the following possibilities were taken into account: the elimination of gross indicators, the cumbersome nature and multiplicity of planning and reporting documents and also existing economic and legal limitations; use of the anti-expenditure mechanism for management; withdrawal from the traditional tariff wage system and numerous types of bonus payments, guarantees for obtaining unearned wages, limitations upon the systems for issuing bonuses and the normative ratio for rates of growth in labor productivity and average wages; the introduction of cost accounting for departments, shops and brigades; increase in control over material expenditures and expenditure of the wage fund; increase in the role played by planning and economic subunits in raising production efficiency; changes in the psychology of people and growth in their initiative.

The system of intra-plant planning and accounting and the organizational structure of administration have been reorganized. For example, changes in operational-calendar planning have led to the introduction of a machine assembly system which has replaced an around-the-clock system and, as a result, the concept of earnings for procurement shops has been introduced. The cost accounting for subunits calls for indicators for legal and economic independence. However, they have still not been worked out completely owing to the fact that the upper and middle echelons of enterprise administration do not always succeed in overcoming the economic dogmas and the desire to receive instructions. A mistake in the cost accounting of departments and auxiliary shops lies in the fact that their maintenance is guaranteed, that is, very little is dependent upon the results of their own operations. At the present time, the principle for the sale by them of their own goods (ideas, services and so forth) to shops of the principal production and to the enterprise is being worked out.

Changes in the organizational structure for administration are being prepared: the merging of the planning and economics department with the department for labor organization and wages and the financial department with central bookkeeping; the transfer of some economic subunits and a portion of the department for ASU's [automatic control systems] over to the SPKTB and the development of relationships with them on a contractual basis. An experiment is being carried out at one of the plants in connection with the creation of a single economic subunit that includes a planning-economics department, a department for labor organization and wages, a financial department and a bookkeeping department and the merging of functions within it (production costs, cost accounting and others). This economic subunit is headed by a chief economist—the chief bookkeeper.

No sharp improvements were noted in the NPO's indicators following the conversion over to the second cost accounting model. The mechanism for stimulating efficiency was not working.

What were the reasons for this? First of all, they had to do with the fact that solutions had not as yet been found for those problems associated with a normative distribution of income and also the resistance of the higher organs towards the second cost accounting model. Today

it has been mastered and is being used only at the plant administration and shop levels. It has not been made available yet to the sectors and brigades.

In the principles governing the development and functioning of the second model, changes should be introduced which will force the work collectives to work better and in a more tense manner, to search for reserves and place them in operation and to become materially interested in carrying out this work. Exactly what is planned?

In the state normative documents, those enterprises which converted over to the second cost accounting model should be granted the legal right: to determine independently the wage forms depending upon the final operational results of a work collective and not upon the results achieved by a specific worker; to leave up to 90 percent of the above-plan income; to approve independently the norms for withholdings for the economic incentive fund.

In addition, the restrictions on the payment amounts should ideally be removed for all categories of workers. We believe it is possible to replace the word mandatory with the word recommended on those state normative documents adopted earlier for regulating the computations for wage scales, rates, salaries, bonus systems and others. A work collective must also be authorized to use them without a change or to develop them anew for themselves.

Importance is attached to eliminating the strict dependence of those enterprises which operate on the basis of the second cost accounting model upon the financial status of the enterprise-customer. A state document is needed which will obligate a branch of USSR Promstroybank, to which an enterprise-customer has been assigned, to pay the account of the enterprise-supplier from its own resources if the deadline for such payment has arrived.

Changes should be introduced into the system and principles for the functioning of the second model, with provision being made for: including a lease payment in the earnings; abolishing the restrictions on the withholding amounts for the financial reserve; excluding bonuses for the all-union socialist competition from income but not from the cost accounting income of a collective; applying the savings realized from a reduction in the payment for bank credit (in accordance with a credit agreement) to the cost accounting income of a collective; crediting the earnings from the sale of fixed capital to the appropriate economic incentive fund; discontinuing the computation of amortization when the depreciation of fixed capital has been completed; abolishing the payment for fixed capital acquired or created by means of an enterprise's own sources; abolishing the presentation of planning and accounting calculations.

Statistical and bookkeeping reporting must be reorganized in the interest of reducing the number of forms and the number of lines on them, with the principles of the second cost accounting model serving as the basis for such reorganization.

The absence of solutions for those problems associated with the conversion of enterprises over to the second model underscores the fact that the departments upon which this is dependent are in no hurry to part with such concepts as gross results, wages based upon rates and bonus systems and so forth. Thus the time is at hand for them to negotiate among themselves and to make the necessary decisions.

Experience has shown that the economists who developed the second model did not have a clear understanding of the accounting mechanism and that they neglected the requirements imposed upon them. As a result, their creation was isolated from real life. Ideally, those who were familiar with the virtues and shortcomings of the second cost accounting model should have been included among the bookkeepers and practical workers responsible for developing it.

Today the Ministry of the Electrical Equipment Industry, jointly with the Velikolukskiy High Voltage Equipment Plant, the Saransk Elektrovypryamitel PO [production association] and the Pskovelektromash NPO [scientific production association] have prepared recommendations for improving the second model. The principal trends for this improvement: strengthening its anti-expenditure mechanism and expanding the legal and economic independence of enterprises.

Second Model Preferred for Cooperatives

18200144a Moscow PLANOVOYE KHOZYAYSTVO in Russian No 12, Dec 88 (signed to press 22 Nov 88) pp 76-77

[Article by A. Gokhshtand, Candidate of Economic Sciences: "For" and "Against"]

[Text] For the future, the second cost accounting form (residual income) is preferred over the first form. With the second form, a work collective has greater independence and also responsibility for its operational results. The question remains as to when and under what conditions it is deemed advisable to convert over to the second cost accounting model and whether or not a mass conversion of state enterprises over to it is possible.

The principal condition for such a conversion—the formation of prices with demand and supply being taken into account. At the present time, they are established by the consumer market and they serve as the basis for cooperative operations. The sphere of use of contractual prices at state enterprises is limited and their use in all areas is hardly possible.

The existing structure of production and its specialization are characterized by the fact that the majority of enterprises are monopolists within their branch, region or throughout the country as a whole. Hence, in the face of a shortage of goods, they will dictate contractual prices to the consumers which will be advantageous to the producer. This is already taking place in large-scale industrial production, where cooperatives are unable to compete against state enterprises. If this process is not controlled, an avalanche-like growth in prices for industrial products will commence and subsequently for consumer goods.

Is it possible to change rapidly the existing production structure and eliminate monopolistic practices? It would appear that the rapid solving of such a task in large-scale industrial production would involve certain complications and there would still be a need for deciding if the carrying out of this task would be advisable in all instances. For a number of types of products, the monopolistic status of a supplier will continue in the foreseeable future. Thus state control over the level of prices for industrial products must be retained for a definite period. There is still one other consideration against the use of the second cost accounting form at state enterprises: here we find conditions involving the hiring of workers (a factor that is often forgotten, specialization is defined and the management is assigned by organs of the state. Even in the case of enterprise leaders being elected, their assignments are carried out by the ministry which, it bears mentioning, has the right to eliminate the enterprise, merge it with others, change its profile and so forth. And this is proper, since the means of production at an enterprise are social property and a ministry is a state organ.

In the case of the residual cost accounting model at an enterprise and as a result of a deterioration in the financial status for certain reasons, there may not be enough funds for paying out not only bonuses but even the principal earnings to a work collective. If success was not realized in improving operations, the state was forced to write off losses at its own expense, since there was nobody else that money could be exacted from.

Since the means of production belong to the state and the workers are hired, they must be guaranteed a wage for a task carried out in a high quality manner and in accordance with the established norms, estimates, rates and salaries, regardless of the financial status of the state enterprise. If this is not done, the social complications in such situations will be inevitable. Thus the overwhelming majority of work collectives prefer the cost accounting model that is based upon a distribution of profit, with the wages being included in the production expenses and increases in wages standardized taking into account the degree to which the increase in labor productivity exceeds the increase in the average wage.

The second cost accounting form is beyond all doubt more promising and one should make every attempt to employ it. However, it is our opinion that it is acceptable primarily for cooperative enterprises, where the means of production are the property of the cooperative and where all earnings are dependent upon the managerial results. In the event of a cooperative's insolvency, it pays off its debts using the property which belongs to it.

At cooperative enterprises, the sense of being the master of one's own production is based upon cooperative ownership. Hence, in our opinion a summons to convert over completely to the residual cost accounting model amounts to shooting ahead of oneself.

What then is the solution and what is needed for a rapid conversion over to the economic managerial methods under the existing conditions?

The recommendation concerning the lease form for the use of state property appears possible to us but not as the only solution. In the case of lease of an enterprise, a worker does not feel that he is the complete owner of the means of production.

An obvious need exists for converting over from stimulating a mass of profit to stimulating a daily increase in it, since the latter reflects a true savings in national labor and in society's net income.

It is believed that enterprises should retain the volume of funds earned earlier and in those areas where because of objective reasons their level is not very great a subsidy should be allocated from the centralized sources. in this manner, the initial starting base for enterprises will be levelled off. In the process, the level of payments into the budget and the higher organization from profit, after having reduced the latter as prices declined following a general review, should be retained. The increase in resources for the economic incentive funds, similar to payments into the budget, must be carried out depending upon an increase in profit according to a single norm or scale. A payment for producer goods and labor resources and the interest for credit should be deducted as immediate payments from an increase in profit. This will make it possible to avoid an unsound increase in prices, which is inevitable with a normative distribution of profit.

During the 13th Five-Year Plan, the norms for distributing an increase in profit will make it possible for enterprises to have equal conditions for their development. The ministries (associations) must be authorized to establish the prices for new products and to lower them for old ones, based upon the need for stimulating production, introducing new and progressive products for the consumers and ensuring the economic conditions required for self-financing for any enterprise that is operating in an efficient manner. The ministry should establish a maximum profitability level, beyond which all profit is to be transferred to the budget. This will force it into systematically lowering prices for the products of its branch.

The stimulation of an annual increase in profit, in comparable prices and conditions for a period of 2 years, will make it possible for enterprises to lower the prices for their products, work and services in a painless manner. The complexities of five-year planning associated with a periodic review of prices can be eliminated by planning an index for lowering them.

Uniform and stable norms and the possibility of avoiding an increase in prices make the growth method of profit distribution more preferable compared to a distribution of its overall mass and place enterprises under equal economic operating conditions.

Supply, Price Problems Remain

18200144a Moscow PLANOVOYE KHOZYAYSTVO in Russian No 12, Dec 88 (signed to press 22 Nov 88) pp 78-80

[Article by M. Karpunin, Candidate of Economic Sciences: "Success Guaranteed Not Only In The Mechanism"]

[Text] The development of complete cost accounting at the enterprise level is playing an important role in the restructuring of the economy. However, there are many difficulties in this area. For example, the "stable" economic norms (and their stability represents the base for realizing cost accounting relationships) in many instances embody the miscalculations of planners and a deliberate inflating of the directive indicators (under the pretext of importance being attached to retaining the tense nature of the five-year plan tasks). The latter limits considerably the search for new and more improved forms for management and in particular it predetermines the selection by a majority of enterprises of the first cost accounting model. Truly, those collectives which were given "unrealistic" planning tasks based upon an evaluation of their economic services, preferred the first model, since it guaranteed retention of the existing wage fund when its volumes of output production and labor productivity were maintained. As a result, only 47 enterprises of the machine building complex (that is, 3 percent of their overall number) converted over to the second cost accounting model.

In the press, including in the materials presented in this article, information is being provided on the higher economic results achieved by those enterprises which are employing the second model and simple conclusions are being drawn regarding its advantages compared to the first model. It is our opinion that such evaluations should be approached from an analytical standpoint. First of all, because today the leading enterprises, those which are distinguished by the use of an intelligent approach in carrying out their work, are operating mainly on the basis of the principles concerned with a normative distribution of income (second model). Secondly, they all have planning tasks for the five-year plan which, although tense in nature, nevertheless are evaluated as having been fulfilled. Thirdly, in the system for compensating for completely obvious risk, a "most favorable" regime was created for this group of enterprises in connection with the development and approval of economic norms: the reality of their normal functioning has been checked thoroughly and, where necessary, a "refinement" of the planning tasks was carried out for some enterprises in the interest of ensuring that the subjectivity tolerated earlier, when computing the latter, was not reflected in a lowering of the economic well-being of the work collectives.

Thus it is fully natural to recognize that the high results achieved in the management of enterprises which converted over to the second cost accounting model are more the rule than an exception. If so desired, it is possible to select groups whose indicators will be no worse and perhaps even better in the case of some operational trends, from among those enterprises which use the first model. Hence a guarantee for success today is not the managerial mechanism which is just being formed, but rather the reality of the planned tasks, the existence of logistical and economic prerequisites for their fulfillment and the level of organizational work in the specific collective. This is borne out by the actual data for January-September 1988 for industry: among enterprises which converted over to complete cost accounting and self-financing and those which did not, there are very few differences in the results obtained (see Table).

(in per cent)

Indicator	Enterprises	
	Transferred over to complete cost accounting	Did not transfer over to complete cost accounting
Rates of growth:		
Output production volume	104.2	104.3
Including non-food consumer goods	109.0	111.0
Labor productivity	106.0	104.0
Average monthly wage	107.4	106.7
Profits (January-August)	110.1	109.4
Level of fulfillment of contractual obligations for product deliveries	98.9	99.0

In our opinion, there is also another important factor: which of the models stimulates to a greater degree the process of forming basically new cost accounting relationships, both at the enterprise level on the whole and also at the intra-organizational level—among structural units of associations (enterprises), including engineering-technical and administrative services.

At the present time, the search for new forms of cost accounting relationships is proceeding along several lines: the conversion of individual structural subunits over to a collective or lease contract, the creation at an enterprise of production cooperatives (thus there are more than 800 cooperatives in operation within the machine building complex, with more than 16,000 individuals employed) and so forth. Experience has shown that all enterprises which are employing the second cost accounting model are carrying out a more intensive restructuring of the intra-organizational managerial mechanism. They are forced into doing this by the very mechanism for the formation of income, which requires coordinated interaction by all services and all categories of workers. If this were not the case, it would be practically impossible to count upon receiving either gross or cost accounting income.

Such an approach for organizing operations has not become the rule for the majority of enterprises employing the first model. Their system for issuing bonuses is often handled apart from cost accounting conditions. In the relationships between enterprises, use is not being made of the principles of economic responsibility and cost accounting complaints and improvements in the skills of workers are not being carried out in a sufficiently effective manner. The desire to attach a local character to the new cost accounting forms is being observed in many collectives: at the level of individual sectors, departments and production operations, despite the fact that it is generally well known that their introduction produces the greatest effect when all structural elements, including engineering and administrative services, are included.

It bears mentioning that any cost accounting model taken in its pure form will not furnish the explosive type of results required for our economy if it is examined apart from other more global components of the managerial mechanism. Here we have in mind radical regulation of logistical supply, reform of the financial-credit system, price formation and the development and implementation of qualitatively new economic norms. The latter must define the level of mandatory return from all types of resources (logistical, labor, information) at the disposal of a collective and the corresponding amount of income to be obtained.

It is our opinion that this type of norm should be supplemented by a system of financial and logistical privileges for stimulating scientific-technical progress. In the interest of constantly renovating on an extensive scale the products being produced and the logistical base for production (based upon the most effective scientific and engineering achievements, a collective must follow the immutable rule of clearly defining what must be stimulated and how it is to be done. Today the rather large unfinished tasks of the economic mechanism have been clearly designated—failure to provide the sources needed for financing, logistical resources and the material interest of both the producers and consumers in the creation and use of new, more economic and productive equipment.

There is still one problem which, if a solution is not found for it, will preclude the normal functioning of any economic mechanism—the training of leading personnel. Today many administrative efforts are being directed towards the formation of new structures for branch and regional administration and towards reductions in the number of administrative-control personnel. And almost no work of any importance is being carried out aimed at training a body of administrative personnel for the new formation: prepared to manage under basically other conditions and to exercise new functional responsibilities; capable of solving tasks associated with forecasting development and mastering marketing; possessing knowledge of all of the vertical and horizontal interrelationships of enterprises and the modern trends in scientific-technical progress, not only in conformity with the object of the principal operations of their own collective but also in related areas; possessing a high administrative culture; representing well the total values of the human factor; capable of combining the interests of the state, an enterprise and its individual workers.

The problems examined in this article are of a general nature as they concern both the first and the second cost accounting models and attention should immediately be given to these problems so as to lose no time in establishing the new economic mechanism.

Second Model Recommended to Increase Incentive, Productivity

18200162 Moscow MOSKOVSKAYA PRAVDA in Russian 9 Dec 88 p 2

[Article by Candidate of Economic Sciences V. Volya and graduate student N. Volgin under the rubric "MOSKOVSKAYA PRAVDA Mail at the Stankoagregat Plant": "We Are Learning Self-Financing—Section Conducted by Department of Economics of the National Economy of the AON [Academy of Social Sciences] of the CPSU Central Committee"]

[Text] *While in the last feature in the cycle (MOSKOVSKAYA PRAVDA of 6 Jun, 10 Aug, 20 Sep and 26 Oct) the discussion concerned ways of raising labor productivity, today is just the time to address the problems of wages. Wages as an economic category and the principal form of material incentive, after all, are part of the net product or profit-and-loss income of the enterprise coming in for the individual consumption of the workers in accordance with their labor contribution to the overall results of the work of the collective. Improving wages is thus justly considered to be an organic part of restructuring economic management and an efficient means of making the economic growth rate stronger.*

As is well known, an increase of the average monthly wage of manual and office workers of 14.7 percent—to 218 rubles—is projected for the 12th Five-Year Plan.

Wages

A general feature of wage dynamics is their steady growth in conjunction with national income to the extent of raises in efficiency and the continuous development of social production. Analysis shows that the average monthly wage of manual and office workers in the national economy from 1986 through 1988 grew by 9.4 percent and comprises 214 rubles.

As for the Stankoagregat Plant, wage dynamics for industrial-production personnel look like this (in rubles):

1985	229.1
1986	239.6
1987	249.2
1988 (first half)	253.8

We point out for comparison that the average monthly wage per worker was 224 rubles for the machine-building complex of the country overall last year. As we see, wages were higher than the average statistical level at Stankoagregat. They are not satisfied with what has been achieved at the enterprise nonetheless. This was confirmed by sociological research conducted at the plant.

Some 242 people were polled in all, including 174 manual workers and 68 specialists and office workers. Just 5.4 percent of them were entirely satisfied with their wages. Over 62 percent feel that they are lower than the results of labor. Some of the machine-tool operators are moreover not sure that growth in their labor activity will receive the corresponding incentive. Only 10.3 percent of those taking part in the poll answered in the affirmative to the question, "If you work more and better, will your wages increase?" including 13.8 percent of the manual workers and 1.4 percent of the specialists and office workers.

Opinions expressed in the course of a poll are not always precise and objective, of course. They are exceedingly symptomatic nonetheless, testifying that the wages still do not provide a proper vested interest in highly productive labor for the workers or the development and realization of their potential capabilities.

About a third of those polled, for instance, feel that they are not fully realizing their abilities at work, and over half are convinced that they could work better than they do. It is instructive in this regard that over a third of those polled assume the unfair resolution of issues of wage payments at the plant.

It seems that this is connected with the slow spread of the principles of full cost accounting in all spheres of enterprise activity. Recall that the State Enterprise Law indicates that the wages of every worker should be determined by the ultimate results of the work and the personal labor contribution and that the maximum size is not limited. The absence of a dialectical interdependence between the results of labor and the wages for it are having a dampening influence on peoples' attitude toward their duties.

At the Stankoagregat Plant, operating according to the first model of cost accounting, the wage fund is formed according to standards that depend on the increase in the standard net product (SNP). The wage fund expended the preceding year is taken as a base, and it is increased (or decreased) by the amount of the relative economy (or overexpenditure) achieved by the enterprise over that period. Another source for wage funds is also formed from profits according to standards—the material-incentives fund.

The wage fund thus does not now depend on the number of workers. This naturally gives the enterprise a vested interest in putting out their products with a lesser number of people.

In our opinion, however, the principle for the formation of the wage fund according to the so-called "base" and increase standards does not point the labor collective toward highly efficient labor. The "base," after all, does not take into account the actual labor-intensiveness, which varies with the rise in qualifications of the personnel, the incorporation of mechanization and automation equipment into production,the overhaul of the range of product output or some other causes. The established standards for increases in the wage fund and the formation of the material-incentives fund are moreover so inconsiderable that they are unable to provide an incentivizing effect in practice.

By way of example, Minstankoprom [Ministry of the Machine Tool and Tool Building Industry] has determined the standard for the 12th Five-Year Plan as a 0.28-percent increase in the wage fund for every percentage point increase in the standard net product. The fulfillment of the five-year plan for growth in SNP volume, set at 48.2 percent, will permit an increase in the wage fund of just 13.5 percent over the five years or 2.7 percent a year. One cannot speak of a vested economic interest of the labor collective in this situation.

In our opinion, moreover, the sector has not chosen the best indicator at all to use as the fund-forming one. It does not point the collective toward reducing production expenses and has a poor tie to such profit-and-loss indicators as product cost or profit-and-loss income. The growth in standard net product, and thus the increase in the corresponding standard for the wage fund, does not always testify to the achievement of good ultimate results in the work of the enterprise.

Plant Chief Economist A. Tolstonozhenko is right to propose evaluating the work of the enterprise by growth in net product. In this case the production activity can be

determined more objectively in the ultimate results, while the labor collective will have a greater vested interest in increasing product output with lower expenditures.

There is also another way of creating a direct vested interest of enterprise workers in the end results of labor—conversion to the second model of cost accounting. In that case a unified wage fund is created that is formed as the residual of the profit-and-loss income of the collective after deductions from it according to the standards for other economic-incentive funds (development of production, science and technology, or social development). Other undoubted advantages of the second model of cost accounting are also well-known, as testified to by the multitude of features in the press.

Two principal forms of wages—by the piece and by time—that can be either individual or collective are traditionally used in industry. Some 73.1 percent of all personnel are manual workers at Stankoagregat. Of those, 66.7 percent are encompassed by piecework pay and 33.3 by wages based on time. The majority are united into teams.

Serious shortcomings in the organization of material incentives and wages have been noted at the 27th CPSU Congress, 19th All-Union Party Conference and the Plenums of the CPSU Central Committee. The regulating role of the rate scale has weakened. Disproportions have arisen in the pay of high- and low-skill workers. Bonuses, premiums and supplements have largely lost their incentivizing role and have turned into a mechanical addition to wages.

Such phenomena are also being observed at Stankoagregat, as testified to by the data of the sociological questionnaire. Roughly 80 percent of the workers polled were convinced of the necessity of a restructuring of the organization of wages. Such work has already begun at the plant, as it has at other enterprises of the country. Seven shops and sections where some 500 people work have been converted to new wage conditions, and the rest should do so before the end of this year.

Three principal directions can be singled out in the restructuring of wages. Its goal is to see that every worker is paid not for participation in labor, as was often the case before, but for its results; second, to remove various types of limitations and "ceilings" in wages that were serving as unique barriers in distributive relations, constantly reminding the workers that it was not expedient or profitable to work more or better than a certain limit, since the wage would not increase in any case; and, third, to expand the rights and independence of labor collectives in evaluating the labor contribution of each to the overall results. The restructuring of the organization of wages encompasses all the principal elements of it: the rate scale, bonuses and the mechanism for premiums and supplements.

The conversion to new wage conditions is being accompanied by a considerable rise in wage rates and salary scales. This increase is moreover occurring on a fundamentally new basis—not through the state budget, but through funds of their own earned by the enterprise itself.

The Stankoagregat Plant will require over 700,000 rubles for conversion to the new wage and salary scales. This sum will take shape from several sources, in the opinion of plant specialists. For example, the plant will obtain 276,900 rubles through additional measures to reduce the labor-intensiveness of product output, raise labor productivity and reduce the number of workers, engineering and technical personnel and office workers. Improvements in the organization of wages, labor-standards setting, the execution of a re-rating and the abolition of premiums and supplements established earlier will make it possible to come up with about 160,000 rubles. Economies in the wage fund for 1987 totaled 142,800 rubles. Increases in the wage fund according to the standards will add 127,400 rubles to the common pot.

A serious problem in the organization of wages that the enterprises have as a legacy of past years is the lack of correspondence of the wages of manual workers and engineering and technical personnel, which has led to a sharp decline in the prestige of engineering work and an influx of the latter personnel into manual jobs, which has restrained the acceleration of scientific and technical progress.

Stankoagregat has not avoided all this either. The average wage of manual workers is 275 rubles, and that of specialists 236 rubles. This is one of the reasons that 16 specialists with high qualifications and 171 with medium qualifications—almost a third of the total number at the enterprise!—are working at manual jobs, and moreover frequently in places where high qualifications are not needed. As analysis shows, this problem will not be solved by the conversion of the collective to the new wage and salary scales, in the course of which an increase in the wages for workers of 22 percent is planned along with an increase of just 19.6 for specialists' salaries. Additional new reserves and sources of funding are evidently needed by the plant to establish a more correct correlation between the wages of manual workers and specialists.

These reserves exist, in our opinion. Through improving the organization of production, for example. Study of its structure, as well as discussions with plant specialists, makes it possible to draw the conclusion of the expediency of amalgamating a number of shops and production subdivisions that are related in function and technology. This would make possible not only the more flexible maneuvering of the labor resources existing within them, but also a certain economy of the wage fund through reductions in a number of positions, which economy could be used to raise the salaries of specialists.

The restructuring of wages is proceeding simultaneously with the processes of improving the mechanism of economic operation overall. These are interconnected processes. In the opinion of the workers of Stankoagregat, however, they are proceeding separately at the plant. Why?

The point is that the work of the enterprise under the conditions of the first model of cost accounting is poorly facilitating the rapid receipt of funds for the introduction of increased wage scales and salaries, as it should be doing, while the preparation of the collective for working under the new conditions is not having an effect on the development and deepening of economic accountability within production. There are few cost-accounting teams at the plant, and only 9.5 percent of the workers are working in them. There are still no sections or shops that are working under the principles of collective or lease contracts, although such experience does exist at many enterprises in Moscow. They are having positive results which should be utilized.

In concluding the analysis of problems in raising the efficiency of wages, it should be noted that their solution depends not only on the wage mechanism itself, but on a whole series of external factors as well. This is testified to by the results of the poll of the workers, who feel that in order to work better, not only is improvement of the organization of labor and production required (this factor was pointed out by 68 percent of those polled), but it is also necessary to saturate the market with consumer goods and services of the needed quality (over 60 percent), to solve the housing and other issues associated with daily life (over 36 percent) and to improve the micro-climate in the labor collective and the families of plant workers (16.5 percent).

The results of the poll of workers at the Stankoagregat Plant cited in this feature, in our opinion, typify the state of affairs in the organization of wages at more than that enterprise alone.

Effectiveness of Second Model Debated

Model Works in Ministry

18200135 Moscow SOVETSKAYA ROSSIYA in Russian 23 Dec 88 p 3

[Article by F. Salmanov, USSR first deputy minister of geology and doctor of geological-mineralogical sciences, and E. Azroyants, chief of the Main Economic Planning Administration of Mingeo and doctor of economic sciences: "Agreement on How To Build the Bridge Should Be Made on the Shore"]

[Text] We recently read in a periodical an interview with P.G. Bunich, corresponding member of the USSR Academy of Sciences, entitled "Why Is the State Inspector Napping?" No single word can convey the impression—it is surprise, perplexity, and indignation all at the same time. The chairman of the Scientific Council of the USSR Academy of Sciences for Problems of Cost Accounting (Khozraschet) and Self-Financing of Enterprises is essentially tearing down the USSR Law on the State Enterprise by declaring that both models of cost accounting envisaged in it are unsuitable.

The logic of the author's arguments is built up on foreign terminology. The first thesis is this: "Practically all enterprises have 'tried out' the first model, and it yielded almost no constructive results." The second thesis: "...when you figure it out (the second model—authors' note), you have to acknowledge that 'it is a choice between two evils.'" The third thesis is that both models leave the same "pie" to the enterprise. "What happens here is like the castling move in chess, which changes nothing." A perplexed question arises: Is Pavel Grigoryevich being playful, or does he really not know the difference between the rules governing the formation and distribution of the "pie" in the first and second models of cost accounting? In any case, it is that kind of "unawareness" that helps to "substantiate" a new and third model of cost accounting.

If we get down to the essence, then the first model is a traditional form of cost accounting. It does not implement the principle that resources should be earned, it links wages to the indicators of the volume of production, and it preserves the previous forms of their distribution. To many scientists and practitioners it was obvious from the outset that this form could not solve the problem of qualitatively new economic growth. The second model of cost accounting is another matter. It differs fundamentally from the first and guarantees that resources will be earned, it makes it advantageous to operate with a smaller labor force and to conserve all types of resources, since the remuneration fund is formed as a remainder after other deductions have been made.

The reason we make this declaration so confidently is that for more than half of the associations, enterprises, and organizations of the USSR Ministry of Geology the second model is no longer an abstraction, but real life. The enterprises in the sector achieved qualitatively new development in 1987 and the first 3 quarters of 1988. While the annualized volume of operations grew 10-15 percent, there was a reduction in the labor force of 20,000, and material cost per ruble of operations dropped 3 kopecks. Labor productivity in physical terms rose 10-20 percent for the principal operations, and the increase was 22 percent when the reduction of production costs is taken into account. Income, which increased 15-35 percent for the year, was used by the enterprises to build up considerably larger production funds and funds for social development than before. The trend toward a drop in the output-capital ratio was turned around, and the rate of turnover of working capital was speeded up considerably.

Because the economic mechanism of the second model of cost accounting was more responsive to personal and collective interests, the qualitatively new results resulted

in a sharp increase in the activity of the workers. It seems to us that there are quite a few reasons for the failure to defend the second model and for off-hand criticism of it. The following might be referred to as the main ones. First: the law merely proclaimed, but did not furnish economic forms for implementing the second model; everything in it was built for the first model. Second: the development of the mechanism of the second model as to methods is not yet finished, and the methods which have been adopted are contradictory and disjointed. Third: the mechanism represents a certain risk for the collective, which is cautious about the unknown, and all of this is played out against the background of the opposition of the majority of specialists of central economic authorities, which has been expressed in public. And finally, the fourth, which is the result of the others: the number of enterprises using the second model is small, quite often the solutions adopted as to methods are nothing other than a compromise between the first and second models (especially in the trade sector and light industry). It can be said that only the geologists have managed to avoid that fate. Which is why today they have the mechanism of the second model that has been implemented in the purist form.

On the basis of what we have said, we state with confidence: we cannot allow any new models, whatever they might be called (the third model, the cooperative model, the nonnormative model). After all, we could get drawn into an unending process in which things are not being built, but constantly improved. Everyone is involved, but no one is at fault. That is why, to speak figuratively, the agreement on how to build the bridge—lengthwise or across—has to be made on the shore.

Everything proposed by P.G. Bunich has been logically incorporated in the principles of the second model. This applies to taxation, the absence of standard rates assigned to the distribution of cost- accounting income, and so on. To be specific, practice has actually led us to the taxation which is today being talked about so much. The economic efficiency of the second model depends on how advantageous it is to operate with fewer workers and to spend less, while the most strenuous quotas become advantageous in a year's time. Many of our enterprises have asked the ministry to raise the rates of transfers to the production fund and fund for social development, that is, to diminish the residual portion of cost-accounting income, which forms the remuneration fund. The way out has in our opinion been found—it is an economic system of taxation of income that operates automatically. We have already developed a design of this system and it is awaiting approval of central economic authorities.

It seems to us that the transition to constructive positions for improving and discovering the potential of the second model and theoretical conceptualization of a number of serious problems which it has raised in the domain of fundamental relations of property and income and economic forms they are to take would be far more useful than the criticism of outside observers. We are not surprised by the position of P.G. Bunich because it contains a viewpoint that is different from ours or from someone else's. We are surprised that the Scientific Council of the USSR Academy of Sciences for Problems of Cost Accounting and Self-Financing of Enterprises, of which he is the chairman, still does not have a clear scientific platform and the methods accompanying it have not yet been worked up.

Unlike Comrade Bunich, we believe in the potential of the second model of cost accounting. Beginning in the new year, all enterprises of the USSR Ministry of Geology, including industrial, construction, scientific, trade, and other enterprises, will operate in the context of full cost accounting. This will be the only branch in the country's economy that is entirely operating according to the second model. The experience which we have built up serves as a guarantee of success.

Bunich Rejoinder

18200135 Moscow SOVETSKAYA ROSSIYA in Russian 23 Dec 88 p 3

[Response by Pavel Grigoryevich Bunich, corresponding member of the USSR Academy of Sciences: "Time Will Tell Which Is Better..."]

[Text] I cannot accept the attempt of the authors to represent the second model as the culmination of economic creativity on whose "bones" irresponsible scientists intend to create new ones: a third model, a cooperative model, a model without assigned standards. I would like to dispute the arguments of my opponents in this connection. For instance, they say that the statement as to the unsuitability of both models "essentially tears down the USSR Law on the State Enterprise." I would like to note at the outset that the law consists of more than these models and that its content is immeasurably greater. The main thing is that we cannot fall in love with decrees, especially in revolutionary stages of development when new things arise more rapidly than in evolutionary stages. This is the thesis advanced against new models of cost accounting: "After all, we might be drawn into an unending process in which we do not build, but constantly improve." But since when has constant improvement become a synonym for "not building"? It is difficult to understand why the senior officials of Mingeo, who moreover do not possess scientific titles, are advocating preservation of their present cost accounting, since there is nothing that is not in need of progress.

So, in the opinion of the authors, the models defined by the law cannot be destroyed. But there are two passages which contradict that categorical imperative. In the view of Comrades Salmanov and Azroyants themselves, the first model "does not implement the principle that resources be earned, relates wages to indicators of the volume of production, and preserves the previous forms for their distribution. It was obvious to many scientists

and practitioners from the outset that this form could not solve the problem of qualitatively new economic growth." It turns out that the authors are permitted to "tear down the law"; after all, they negate half of it. By their own assertion, the second model is encountering the publicly expressed opposition of "a majority of specialists of central economic authorities (especially in the first stage 1985-1987)." Isn't it true that the geological economists are today taking up the same position with respect to the new forms of cost accounting?

And now as to the "trump card"—they say that in the second model the remuneration fund is formed as a remainder. As a matter of fact, this opinion is quite widespread. But I will be so bold as to think otherwise. I am supported in this by a great number of responses to my article and requests from the managers of a substantial number of enterprises that they be given help in making the transition to real cost accounting, bypassing the second model because it is insufficient and does not provide synchronization between the results of work and payment for it, that is, the authentic "residual nature" of wages. This in fact comprises the scientific platform of the Council of the USSR Academy of Sciences for Cost Accounting, which was not noted by my opponent, possibly because they do not like it.

If we do not look at the details, which by definition do not change anything, then in compiling the plan for the remuneration fund individual wages coincide absolutely to the kopeck, that is, are reproduced, in the first and second models, in the sense that no matter how poorly you work, you will not go to ruin, and no matter what effort you make, you will not become any richer than anyone else. When plans are being carried out, wages differ in these two models because in the first model remuneration is predominantly built up as a percentage of normative net output; in other words, it does not depend on the saving or overexpenditure of material costs compared to the plan. In the second model, it is computed from actual net output. For that reason, those who have conserved raw materials and supply, have larger income, and those who have overconsumed them, have less. As a consequence, people have begun to be more thrifty with resources and have been earning more. This is the "secret of success" of the second model, but...no one has in principle "ordered" enterprises to compute wages from actual net output even in the first model. Should they do that, then the first and second model converge both in the "plan" and also in the process of its fulfillment. In Minneftekhimprom (the first model of cost accounting), where the indicator of actual net output is already being applied, labor productivity rose 11 percent in 1988. In Mingeo (second model), according to the authors' figures, it rose 10-20 percent in nearly 2 years, i.e., by approximately the same proportion even in the maximal variant.

This is what we take the authors to be saying: the second model is without defect, since this has been proven by the experience of Mingeo, which, thanks to application of the second model in the branch, has "achieved qualitatively new development." But could such a miracle have occurred in just 1 year and 9 months of operation of the second model, when in addition it was applied by only half of the enterprises? Can it have been so easy to find and implement on a large scale fundamentally new technical solutions? The authors themselves involuntarily confirm the legitimacy of such doubts. They describe their unusual achievements above all in terms of the fact that the branch fulfilled and overfulfilled all planning targets. But in our country almost everyone fulfills and overfulfills plans. We are among the world's leaders with respect to the percentage of their fulfillment. And those who have reduced their assignments to a greater extent are furthest ahead of all the others. It would seem that the performance of a branch should not be judged as much with respect to this indicator as with respect to the level of strenuousness, the level of performance, and the real efficiency of production. Here, there is no evident reason for euphoria. The authors would seem to be writing about an immense triumph that material costs of Mingeo have dropped 3 kopecks per ruble of operations over almost 2 years. But such performance can hardly be regarded as "qualitatively new." Leasing increases efficiency 1.5-fold or more. That would come close to something qualitatively new. But in general it is consumers who must give grades to producers. Otherwise we have a situation in which the pupils give their own grades. And so here the senior officials of Mingeo, with no false modesty, declare that geology "will be the only branch of the economy operating entirely according to the second model." Luck, as they say, be with them. But would it not be better to wait a bit with the self-advertising, to see the difficulties and problems objectively, to think about the non-normative model of cost accounting, the leasing model, to compare oneself not to the past, but to the possible benefit of future forms of activity?

The argument is as follows: "Everything that P.G. Bunich proposes, and even more than that, is logically incorporated in the principles of the second model. This applies to taxation, the nonnormative nature of distribution of cost-accounting income, and so on." This was an unexpected finish. The non-normative model, it turns out, is incorporated in the normative model. If the authors are in favor of the non-normative model, but are only referring to it as the second (normative), then what is the argument about?

The letter from Comrades Salmanov and Azroyants did not even contain a direct analysis of the specific nature of the non-normative model, which is a crucial point in the debate. By contrast with the first and second models, the non-normative model means that after the fund for replacement is formed, taxes are paid, rent is paid, and the payment is made on labor resources, enterprises will independently distribute the entire remainder of their proceeds. Collectives themselves decide without assigned standard rates how much they will commit to

the remuneration of labor and how much to accumulation. If the remainder from proceeds is small, both wages and development funds decline. No one will come to help: in full cost accounting one has to rely on his own resources and to be all the time thinking, inventing, and applying. Then there will be more residual proceeds, and this will augment the income of everyone according to his contribution to performance. Nor will accumulation funds be forgotten. After all, today's accumulation is tomorrow's wages. What is more, the desire for accumulation could be stimulated if its value is "assigned" workers and they are subsequently credited with dividends for that value. Then the form which accumulation takes is no longer "someone else's," but "one's own," and is just as desirable as remuneration funds. The Sumy Machinebuilding NPO imeni M.V. Frunze has far greater independence and motivation than enterprises operating according to the "standard" models. This is far from the ideal, but a step toward it. The All-Union Association "Ekspotsentr" of the USSR Trade and Industrial Palace is being transferred to the nonnormative model in 1989. The cooperators also have a nonnormative model, and there is no need to force them to work.

The letter ends with the ritual assurance that the experience built up by Mingeo will serve as a guarantee of success. Time will tell which is better: repetition of the second model or a direct transition to the nonnormative model (incorporating the leasing model). But we shall see the results not as dispassionate recorders of events or curious observers, but by applying every effort for the success of economic restructuring.

Issues in Choosing First, Second Model Assessed

Differences Explained

18200104a Moscow EKONOMICHESKAYA GAZETA in Russian No 47, Nov 88 p 8

[Article by S. Fatyanov, candidate of economic sciences]

[Excerpts] The leading principle of the new economic mechanism at the level of the basic unit of the economy is established by the USSR Law on the State Enterprise as being complete cost-accounting and self-financing. Its essence consists in changing the enterprises over from conditions whereby the necessary resources and the wage fund are provided to conditions whereby financial funds are earned. The collective must live according to its means and earn for itself enough to settle accounts with the budget and ministry according to normatives, for scientific-technical, production, and social development, and for payment for labor. Budget financing is retained only to resolve the largest and most important state problems. Moreover, the enterprises will be able to take out bank credit but interest must be paid and then it will come from money earned by the enterprise. [passage omitted]

In changing over to complete cost accounting the enterprise, with the permission of the higher agency, can use one of two models of cost accounting. The first is based on normative distribution of profit and the second, on normative distribution of income. The major task consists in skillful management according to the selected model. But doing this is impeded a great deal as the principles of complete self-recoupment, self-financing and complete economic responsibility are applied half-heartedly, in truncated form, noncomprehensively or incompetently. Therefore it is important to know the peculiarities of each model of cost accounting.

What Cost Accounting Depends On

The central area in both models is cost-accounting income. It becomes the main source of scientific-technical, production, and social development of the enterprise and payment for labor. Cost-accounting income is placed completely at the disposal of the labor collective, is used independently by it, and is not subject to being withdrawn. Its amount is directly influenced by various omissions in their work, which can significantly reduce the funds left at the disposal of the collective.

Thus cost-accounting income covers the shortage of internal circulating capital, makes reimbursement for losses caused to other organizations in the state, and pays for fines, forfeitures and other sanctions established by legislation. Cost-accounting income is used to cover losses resulting from transferring property to other enterprises and organizations and also selling it and writing it off. Cost-accounting income is also reduced when profit unjustifiably obtained by the enterprise as a result of violation of state price discipline or failure to observe standards and technical specifications is withdrawn into the state budget. Moreover, if the enterprise has allowed a price increase and received unjustifiable profit it also pays from cost-accounting income into the budget a fine in the amount of the illegally received profit.

The changeover of an enterprise to cost accounting makes it necessary for the collective to produce products that are in demand. If these products do not move and are not sold, the collective can end up in a state of bankruptcy.

It is necessary to keep track of earnings received from the sale of products, work and services almost every day. If there are earnings there will be something to distribute: profit or income. If the necessary earnings are not there, the labor collective can actually end up without wages or an economic incentive fund.

"Party committees of enterprises, the administration, and councils of labor collectives," it was especially emphasized at the recent conference of the CPSU Central Committee regarding questions of deepening cost accounting, "should hasten their activities to break one of the impediments to the introduction of effective cost

accounting—the ingrained dependency, equalizing, and the confidence that regardless of how the enterprise may operate the state will provide for wages.

"Of course socialism is a society of guarantees. But guarantees are given with certain commitments. It is necessary to rectify the situation and pay only for the actual results, for the work, and for the quality and quantity of labor."

How To Obtain Funds for Wages

The two models of cost accounting are distinguished from one another in principle by the conditions for the formation of the source for paying wages. In the first model, the main source—the wage fund—is formed according to a normative from indicators related to the volume of products produced (jobs, services). The other source—the material incentive fund—is formed according to the normative from residual profit.

Additionally, taking into account the branch peculiarities, two methods are applied for forming the wage fund: the first is based on gross normatives (it is applied in industry, agriculture, and rail transportation), and the second is based on level normatives (it is used in construction and automotive transportation).

According to the first method the wage fund is determined as the sum of two amounts: the fund of the base year and the increase (reduction) of the fund calculated according to the normative for each percentage of increase (reduction) in the volume of production of products according to the indicator adopted for calculating labor productivity. According to the second method, the wage fund is formed according to normatives per one ruble of volume of work.

The second model of cost accounting envisions the formation of a single source for payment for wages—the wage fund. Of principal importance here is the circumstance that it is formed in the form of the residual after deductions according to normatives into the budget, and for the ministry, and the formation of the fund for the development of production, science and technology and social development. As we can see, this is the most direct link between the results of labor and payment for it. The wage fund will increase with an increase in cost-accounting income. And this is attractive. But if the enterprise operates poorly, the residual method for forming the wage fund can lead to a situation where there is no money to pay for wages. The second model of cost accounting increases the general interest and responsibility of the collective of the entire enterprise for high results of labor.

Thus it is not difficult to see that the first model in terms of the conditions for the formation of the wage fund creates greater stability. Why? Because this source of remuneration for labor is formed from indicators that are not directly linked to product sales. Its conditions, as we know, may not depend on the enterprise itself to a significant degree: for example, if railroad cars have not been delivered on time, if there have been interruptions in the delivery of containers, if goods have been delayed en route, if payment instructions have not arrived on time, if the consumer has unexpectedly gone bankrupt, and so forth.

With the first model the lack of a close interconnection between the conditions for the formation of the wage fund and the conditions for product sales objectively creates the possibility for the unconscientious producer to produce items mainly for the warehouse for a long time, to give the consumer commodities that are known to be of poor quality, not to give any special thought to protecting the cargo en route, and not to burden himself with concerns about accelerating the turnover of circulating capital, not allowing nonproductive expenditures and losses, and so forth.

The mechanism for forming the wage fund according to the second level of cost accounting is largely risky in nature. This risk is conditioned by the entire totality of factors related to the changing nature of demand, the conditions for sale of the final products, and the balance of unrealized income, expenditures, losses of time, and also losses of money.

With skillful management this risk can be turned into a significant advantage. How? The second model contains large possibilities of increasing the wage fund not only by increasing earnings from product sales, but also reducing their material- and capital-intensiveness and achieving a positive balance in nonsales incomes through reducing to a minimum all kinds of fines and nonproductive losses of time and collective all kinds of penalties from negligent partners.

Toward New Forms of Management

The majority of labor collectives are working today under conditions of the first model of cost accounting. The second model is being applied at only 172 enterprises. It seems that the existing ratio in the distribution of forms of cost accounting have reflected as in a mirror not only the desire, but also the real possibilities and readiness of the labor collectives, planning-economic services, and also the management personnel of ministries, associations and enterprises to change over to more progressive management methods. This is an objective process. The first model is a kind of transition to the second and makes it possible for the collectives to master the new management methods, to reveal the production reserves and put them to work, and to stabilize its economic position. The first model is a unique testing ground for mastering economic methods of management and developing new economic thinking in the people. Of course this process cannot be drawn out over a long time.

As we know, the question of eliminating the difficulties that exist on the path to mass dissemination of the second model of cost accounting was discussed at the July Plenum of the CPSU Central Committee. In his report, M. S. Gorbachev stated: "It is being suggested to offer the labor collectives the right to independently choose one form of cost accounting or another and to strengthen their interest in utilizing the second model. This will mean a rejection of the establishment from above of normatives for the formation of the wage fund and distribution of profit. Intraproduction relations will be arranged on the basis of the distribution and utilization of cost-accounting income and relations between the state and the enterprises will be regulated by tax rates in combination with the system of state benefits."

It would seem that mass mastery of the new management methods and the utilization of the second model of cost accounting will become a necessary step toward a large-scale changeover of enterprises to a new, more responsible level of independent management based on the rental contract between the enterprise and the higher agency. The higher agency is transformed from a command staff into an equal partner. The economic conditions for management established for the enterprises become longer-term (a minimum of 10-15 years) and consequently stable, and also more definite. For the amount of the rental payment is established in an absolute sum for the entire period the agreement is in effect. And, finally, under the conditions of rental relations the enterprises are given the right to make independent decisions concerning the areas for the utilization of cost-accounting income.

Choice of First Model

18200104a Moscow EKONOMICHESKAYA GAZETA in Russian No 47, Nov 88 p 9

[Article by T. Chernova, deputy director for economic problems of the Trekhgornaya Manufaktura Combine: "There Are No Ready-Made Formulas"]

[Text] **"Beginning in January of next year our enterprise will be operating under the conditions of complete cost accounting according to the first model. I should like to read about the experience of other collectives that have selected the first form of complete cost accounting," writes economist Ya. Kotov from Kaluga in his letter to the editors. The questionnaires from the readers D. Mishanin from Tolyatti, V. Yegorov from Leningrad, L. Kolesnikov from Gorkiy, L. Berkovskaya from Pavlodar and many, many others also show the large amount of interest in articles concerning issues of the work of collectives that have already changed over to complete cost accounting and self-financing.**

First of all, a couple of words about Trekhgorka and the peculiarities of its production. This will help us to understand better the mechanism of economic activity of an enterprise using the first model of cost accounting. During a year the combine produces 193-195 million square meters of fabric worth a total of 300 million rubles in retail prices. The assortment is also varied: up to 35 items in bleached, smooth, and printed kinds of fabrics, up to 120 items with figures with the index "N" and especially fashionable items sold at contractual prices. The combine delivers fabrics to 1,200 recipients in practically all corners of the country.

The large variety of fabrics that are produced and the extensive geography of the consumers create certain difficulties in fulfilling contractual commitments, but at the same time they make it possible to find ways of obtaining the maximum volume of profit. Each year the combine receives a sum of 30-31 million rubles in profit. From what is this volume formed?

The average profitability of the combine's products (including yarn, unbleached fabric and prepared fabric) according to the level of price list prices is about 15 percent, which makes it possible to obtain 27.1 million rubles in profit from product sales. As a result of producing fabrics with prints with the index "N" and especially fashionable fabrics sold at contractual prices the combine receives an additional 4 million rubles.

A Guarantee of Stability

What does the first model of cost accounting provide for us?

I do not think that at this point anybody can give the collective of a specific enterprise a simple answer as to the path it should take or the model of cost accounting it should select. Here again, there can be no ready-made formulas. After all, the selection of one path of development or another should be economically substantiated and based on careful analysis and comparison of all variants of management that are possible for the given enterprise.

For instance, for our combine operating under the conditions of the first model of complete cost accounting makes it possible to predict the financial conditions several years ahead. Even normative distribution of itself (and this is precisely what the essence of the first model of cost accounting consists) includes a certain stability concerning financing and the formation of economic incentive funds. And the most basic thing is that a certain level of wages is guaranteed.

There are now 3,370 people working at the combine, including 2,830 or 84 percent who are industrial production personnel. The average monthly earnings of one worker is 240-245 rubles and it is increasing. When changing over to the second model or the rental contract, as we know, a unified wage fund will be formed whose level depends on the formation of the funds for social and technical development. That is, the stability of the

middle wage level can be destroyed which does not always have a positive effect on the moral and psychological climate in the labor collective.

When analyzing the combine's financial position from the results of its operation during 9 months one is struck by the fact that the combine sends the lion's share of its profit to the state and to local budgets. One must say that this large percentage of deductions is typical of enterprises of the textile industry, especially for finishing productions that process prepared fabrics. At the same time, for spinning and weaving productions it is determined at the level of 35-40 percent.

What has brought about this kind of distribution of normatives? First of all, the fact that when they were established they took into account the results with which the enterprises approached 1987. Thus in 1986 our combine deducted into the budget more than 86 percent of its calculated profit. True, there is an objective factor which cannot but be given attention. Textile enterprises that produce prepared fabrics have a good possibility of obtaining additional profit through the existing system of increments to listed retail and wholesale prices for producing products with the index "N" and especially fashionable products that are sold at contractual prices. This profit is excluded from the overall mass of profit and thus the normative of deductions does not apply to it. As special profit it is deposited into the economic incentive fund according to a special policy.

Profit and Fines

Fines paid by the enterprise and received by it from associated enterprises for the violation of contractual commitments exert a great influence on the profit remaining at the disposal of the collective.

As one can see from the table, the ratio between fines paid and fines received according to the results of 9 months was not in favor of the combine (it paid 1.104 million rubles and received 320,000 rubles). As a result, the profit decreased by 784,000 rubles and, consequently, revenues into the economic incentive fund decreased by this amount as well.

Table 1

Results of Combine's Operation	According to 1988 Plan	9 Months of 1988			
		Plan	Actual	Deviations From Plan	
				+,-	percent
Profit from product sales	31050	22695	23502	+807	103.5
Subtracted from profit	9323	6942	9028	+2086	130.0
a) Payment for funds (6 percent of average annual value of production capital)	4506	3373	3375	+2	100.06
b) Payment of interest on bank credit	632	474	694	+220	146.4
c) Special profit	4185	3095	4939	+1844	159.6
Including:					
—Increment to retail prices for fabrics with index "N"	3256	2404	3236	+832	134.6
—Additional profit from especially fashionable fabrics sold at contract prices	644	477	1471	+994	308.4
—Profit from consumer goods shop	285	214	212	-2	99.1
d) Profit obtained on "Communist Saturdays"	—	—	20	—	—
Calculated profit	21727	15753	14494	-1259	92.0
Deductions into state, local budgets					
—Normative deductions from calculated profit (percent)	83.81	83.81	83.81	—	—
—Total deduction	18209	13202	12147	-1055	92.0
Sum of fines paid and received (influence on profit +, -)	—	—	—	-784	—
Profit remaining at disposal of combine for economic incentive funds	3518	2551	1563	-988	61.3
Deposited:					
—Into material incentive fund (22.2 percent)	781	566	347	-219	61.3
—Into fund for social development and cultural measures (45.6 percent)	1004	1163	713	-450	61.3
—Into fund for development of production (27.3 percent)	960	697	427	-270	61.3
—Into enterprise's financial reserve (4.9 percent)	173	125	76	-49	60.8

The cost-accounting income is essentially influenced by the system of economic sanctions applied against violators of contractual discipline. In 1987, for example, fines for failure to deliver products in the correct assortment

were determined at the level of 7 percent of the value of the product. And these fines snowballed since when deliveries are not made in any one month, and are not made up for before the end of the year, the sum of fines increases geometrically.

In August of this year new provisions concerning product delivery were introduced which somewhat eased the situation of textile enterprises that produced prepared fabrics. The level of fines decreased to 4.6 percent. But one essentially important aspect was not resolved. We are speaking about the lack of correspondence between the material responsibility of enterprises that produce consumer goods and enterprises that deliver auxiliary materials for them.

The fines for failure to deliver the prepared products (particularly fabrics) are taken from the value of the delivery shortages in retail prices, and for failure to deliver raw materials, processed materials, dyes and other chemical preparations—from their value in wholesale prices. And this is a significant difference.

Our relations with enterprises of the chemical industry have been especially difficult. One must say that this year the situation with respect to delivery of chemical materials and dyes has improved considerably. But there were certain interruptions in the first quarter which have a negative effect on the rhythm of production and the dispatch of products, mainly printed fabrics. The combine was forced to pay 343,000 rubles in fines (last year it paid 750,000 during this same period). Enterprises of the chemical industry paid us a fraction of this amount.

Another difficulty consists in that the enterprises that produce consumer goods are materially responsible for failures to make deliveries each month, and enterprises of the USSR Ministry of the Chemical Industry—each quarter. This makes it possible for them to change delivery dates within the quarter without penalty, and to deliver their products in the middle or at the end of the quarter. We are certainly not indifferent to these changes in time periods, for they significantly affect our production rhythm.

The Formation of Funds

But profit that is obtained according to normatives that are set as stable up until the end of the five-year plan are deposited into the economic incentive funds. And during the course of the formation of the funds for wages, one takes into account the ratio between the growth of labor productivity and the average wages. For our combine this normative is 0.6.

As concerns the fund for social and cultural measures and the funds for the development of production, it would seem that the normatives for their formation should be determined by the collective itself, depending on the need for funds for various purposes. Incidentally, with the rental contract this is the way the funds are distributed.

The additions to the economic incentive funds for the combine are presented in the table. It does not require any special commentary, since everything is clear from it. But I should like to draw attention to the indicator that is one of the most important sources of financing for the funds for the development of production. This is the sum of amortization deductions used for complete restoration of fixed capital. Amortization funds do not always remain at the disposal of the enterprise, since the normative has been determined for deductions into centralized funds of the ministry. For our combine this is 41.8 percent.

Table 2—Economic Incentive Funds (thousands of rubles)

Sources of Financing According to 1988 Plan	Material Incentive Fund	Fund for Development of Production	Fund for Sociocultural Measures and Housing Construction	Financial Reserve
From profit, remaining at disposal of enterprise according to established normatives	781	960	1604	173
From sums of increments to retail prices for fabrics with index "N"	1521	1465	1465	—
Additional profit from sale of especially fashionable fabrics at contract prices	97	128	129	—
From consumer goods fund	40	171	60	—
From bonus fund for BRIZ for economizing on electric energy and return of condensate, for secondary raw materials and exports	82	—	—	—
Deduction (58.2 percent) of sum of amortization	—	1825	—	—
Earnings from disposal of property	—	25	—	—
Total	2521	4574	3258	173

A quite legitimate question arises—will the combine have enough money left from the economic incentive fund for technical and social development? So far the needs of the collective are being satisfied. But next year

there will not be enough. We wish to develop housing construction. The Pioneer camp is in need of construction. Our expenditures on maintaining children's preschool institutions are increasing. Considerable amounts of money are needed for technical retooling and construction of warehouse facilities.

If one sums up the results of what has been said, one can draw a conclusion: today for the combine operation according to the principles of the first model of complete cost accounting and self-financing is the most acceptable. At the same time I should like to emphasize once again that work according to any model of management will be effective if the labor collectives take full advantage of the rights and independence granted to them by the Law on the Enterprise.

Choice of Second Model

18200104a Moscow EKONOMICHESKAYA GAZETA in Russian No 47, Nov 88 pp 10-11

[Article by A. Lavrentyev, deputy chief of the Main Economics Administration of the Electrical Equipment Industry: "What Practice Teaches Us"]

[Excerpts] Beginning this year, all enterprises and organizations of the electrical equipment industry are working under the new management conditions. A remarkable feature: 52 enterprises and organizations of the branch have selected the second model of complete cost accounting. As we know, up until 1988 the principles of this model were applied only by light industry enterprises.

The First Results

Let us recall that, as distinct from the first model, which is based on normative distribution of profit, where the collective's wages depend on the increase in the volume of normative net output, according to the second model the wage fund is formed by the residual method. Having sold the products, subtracted everything spent on them, settled accounts with the budget and the ministry, and formed the Fund for the Development of Production and the Fund for Social Development, what is left over is the wage fund. Everything is simple: if you work better you will receive more. The ruble that is earned is directly linked to the concrete contribution and the enterprise's income.

What has practice shown?

During 9 months of this year enterprises working according to the second model have achieved better results (see table).

Table—Results of Operation of Enterprises of Ministry of the Electrical Equipment Industry During 9 Months of 1988

	Fulfillment of Contractual Commitments Since Beginning of Year				Growth Rates (9 Months of 1988 Compared to 9 Months of 1987, in percent)		
	percent of Fulfillment of Commitments		Products Not Delivered, Millions of Rubles		Profit (income)	Labor Productivity	Volume of Output
	1988	1987	1988	1987			
Total for enterprises of branch	96.8	94.7	376.5	601.7	113.5	109.2	108.1
Of this, for enterprises:							
Operating according to model 1	96.5	94.2	352.4	551.1	114.6	108.8	107.4
Operating according to model 2	98.7	97.0	24.1	50.6	110.6	110.6	111.5

The main advantage of the second model of cost accounting that enterprises of the branch have managed to evaluate during 9 months of operation is its anticost nature. The utilization of the income stimulates the reduction of material-intensiveness. Moreover, the immediate influence of savings on the wages has an appreciable effect on each cost-accounting subdivision.

With the established normatives for interrelations between the enterprises and the state budget and the ministry as a whole for the group of enterprises operating according to the second model, from each ruble ofsavings on material expenditures 62 kopecks remain at the disposal of the collectives and 49 of these kopecks go into the wage fund (for comparison: with the first model, in this case 11 kopecks would go into the material incentive fund).

The introduction of the second model of complete cost accounting at the enterprises required a restructuring of intrabusiness activity in all spheres: cost-accounting relations of the subdivisions and the structure of management began to change radically and increased requirements were placed on personnel.

Of course cost accounting was also in effect at the enterprises previously. But, as a rule, it was symbolic and formal in nature. The shops and subdivisions did not have their own financial sources. Losses arising during the course of production because of tardy and poor-quality repair of equipment, irregular provision of resources and means of transportation for production, failure to observe standards and technical specifications, and nonproductive outlays, as a rule, were not properly compensated for. Few of the workers felt these losses in their own earnings. Now every mistake in their work is evaluated by the workers themselves: a collective submits claims against another collective and the sum of claims reduces the income.

[passage omitted]

How To Form Income...

[passage omitted]

Practice in utilizing the second model shows that special concerns are caused by this negative tendency. With generally positive results of the work of the collectives even at the best enterprises above-normative supplies of commodity and material values still continue to accumulate, and there is extension of indebtedness to the suppliers and the bank.

Why does this happen?

The fact is that at the present time the income does not reflect the actual availability of monetary funds in the running account of the enterprise. According to existing methods it is determined as the difference between earnings from sale of products and material and other expenditures written off for this. But material expenditures that are written off for sold products do not take into account all the actual expenditures of the enterprise. The enterprises have the possibility of artificially increasing income by manipulating residuals of incomplete production and unsold products.

The enterprise's income should be the less, the more money is spent on the acquisition of raw and raw processed materials and the more the stockpiles of incomplete production and supplies of prepared products in the warehouses have increased. But in practice this is not the case.

When determining the income they also fail to take into account the change in indebtedness to supply enterprises and the banks for financial obligations, whose due dates have arrived.

Let us give this example. The Svirsk Vostsibelement Plant during 9 months of 1988 formed an income in the sum of 17.9 million rubles while the enterprise's indebtedness to the bank for loans for material supplies and production expenditures taken together was 12.9 million rubles. The enterprise made payments into the budget for a sum of 4.5 million rubles and has a cost-accounting income in the amount of 12.4 million rubles, including the unified wage fund—10.4 million rubles.

Thus the income received through calculation does not characterize all the actual expenditures or the fulfillment of commitments of the enterprise to the contracting agents and the bank, but determines its conventional financial position.

This approach to determining income makes it possible to utilize in production and economic activity more money than is actually available, thus violating the balance between material and monetary resources.

The question arises: will it not be better to change over to accounting for cash money, that is, to form the real income of the enterprise by determining it as the difference between the money paid for the sale of products and that paid for the cost of material resources?

Under these conditions for the Svirsk Vostsibelement Plant the income used for accounts with the state budget in the formation of the enterprise funds, including the wage fund, should be not 17.9 million but only 5 million rubles.

It would seem that this is the only way to make the enterprises correctly evaluate their capabilities with respect to supplies of material values, to conduct efficient purchasing, and to optimize the production process. After all, each ruble spent on paying for unnecessary materials with the same 49 kopecks will be reflected in the wages.

Of course this should stimulate a reduction of the time periods for the circulation of circulating capital and a reduction of supplies of commodity and material values and should contribute to intensive development of wholesale trade in means of production.

Under these conditions there is no longer a need to establish a normative for internal circulating capital of the enterprise or to calculate stable liabilities as a source for covering their own circulating capital for the maximum level of supplies of material values per ruble of commodity output. The policy for granting credit is also simplified. It is understood, however, that within the framework of the proposed system the insolvency of the clients should be reduced to a minimum.

According to the new concept, the earnings from the sale of products, jobs and services should include money that comes into the running account and the cash of the enterprise from all kinds of activity except that which has special purposes.

But at the present time the earnings include basically money from the sale of commodity output.

Because of the fact that income will be determined with respect to all kinds of activity of the enterprise, it would apparently be expedient to keep all accounts for commodity and material values and services with a single running account. This will combine calculations for basic, investment, and other kinds of activity of the enterprise (except for the financing of centralized capital investments).

At the present time several separate accounts are used (running, for financing capital investments, for keeping money from the fund for the development of production, science and technology and the fund for social development, and a number of loan accounts).

Under the new conditions the collectives have the possibility of greater maneuvering with their own monetary funds and they become more responsible for efficient utilization of money.

The source of reimbursement for payment of interest on short-term credit is also changing. Under the existing conditions deductions for the bank are made from the income.

It is now being suggested that interest be paid from those items of expenditure for which the short-term credit was taken out: the wage fund and other funds.

Now deductions for social security are excluded from earnings (just as material expenditures), that is, they are expenditures and not part of the income. In the new system of the second model these deductions will come out of the cost-accounting income, since by virtue of their economic essence they are part of the necessary product.

...And How To Distribute It

Lengthy practice in applying payments for resources when forming the income part of the state budget shows that, unfortunately, they do not stimulate an increase in the effectiveness of the production potential and do not motivate the enterprises to engage adequately in resource saving.

Here one must keep in mind that payment for resources are made not by all enterprises but only by those which have more income or profit.

The application of payment for production capital, like payments for other resources, characterizes the growth of the fiscal function of economic normatives and shows the small amount of interest of the financial system in the final results of the operation of enterprises and its concern for immediate budget problems. The utilization of all kinds of resources should be correctly reflected in production outlays.

Income Tax

The variant proposed by the branch stipulates that mutual relations between the enterprises and the state budget and higher organization be constructed on principles of taxation of income.

Moreover, under the current five-year plan the tax rate should be individual in nature, since it is necessary to retain the commitments to the state budget and the higher organization that were made in assignments and calculations for the five-year plan. But for the 13th Five-Year Plan it is intended to make the tax rates on income the same for all enterprises (in their totality they should not exceed 30 percent of the enterprises' income).

Analysis shows that it is expedient to give the enterprises the right to independently divide up the cost-accounting income into the economic incentive funds.

This approach will do more to stimulate their initiative and will make it possible to distribute available money for purposes of production and social development, taking into account the tasks that are facing them.

Instead of two funds—for development of production, science and technology and for social development—it is suggested that they form one fund for scientific-technical and social development that will be used by the enterprise depending on the needs for financing expanded reproduction and social needs.

Now, as we know, the enterprises can independently form the financial reserve from planned and actual cost-accounting income (before its redistribution) or from estimates of the Fund for Social Development and the Fund for the Development of Production.

At the same time the amount of the reserve is limited to 5 percent of the sum of profit (income) transferred to the Fund for Social Development and the Fund for the Development of Production, Science and Technology. This restriction, of course, bears witness to the survival of administrative methods of regulation from above and sometimes infringes on the interests of the enterprises.

How does one change the situation here?

It seems that it would help to create a fund for financial risk at enterprises which would be intended mainly for unforeseen expenditures related to the assimilation of new technical equipment. It could also be used for wages. The enterprise itself determines the expediency of the creation and the amount of the risk fund and the areas for its utilization.

According to the concept developed in the branch, the enterprises independently develop and approve normatives for the formation of the risk fund and the Fund for

Scientific-Technical and Social Development. The enterprises will form these normatives along with the five-year plan and they will not change all the time they are in effect. The normatives can be differentiated for the various years, but they are stable for the five-year plan.

Incentives for Technical Progress

The second model, unfortunately, cannot radically change the situation with respect to the introduction of the achievements of scientific and technical progress at enterprises or significantly influence the level of updating of products or the increase in the proportion of products that correspond to the world level.

As before, the enterprises have no interest in mastering new technical equipment. For the old products, as a rule, are highly profitable. And the collectives lose income when they assimilate new ones. Attempts undertaken in the branch to specifically plan the quantity of robots, flexible production systems and processing centers necessary for introduction produced no effect.

Practice suggests that it is necessary to have an integrated mechanism that economically influences technical progress.

It is being suggested that such a mechanism be constructed in the branch through a system of tax benefits (in the form of rebates from deductions into the state budget and to the higher organization).

But what are these benefits?

The Fund for Scientific-Technical and Social Development would receive 15 percent of the value of fixed production capital introduced with money from this fund and bank credit and 25 percent of the sum of capital investments used for environmental protection as well as 100 percent of the income from the output of new products that correspond to the world level in the first year of their assimilation.

This same fund should also receive 50 percent of the income from the output of new products in the second year of production and 25 percent of the income in the third year of production, as well as 25 percent of the income from the volume of products delivered for export for freely convertible currency.

Of course initially deductions into the state budget and for the higher organization will decrease because of the introduction of the system of tax benefits. But subsequently, as calculations show, this will made up for 100-fold.

Let us recall that advanced capitalist countries utilize tax breaks fairly extensively to stimulate scientific and technical progress and accelerate the investment process.

It is intended to introduce a program of accelerated amortization for individual kinds of progressive equipment that makes it possible for the enterprises to utilize it better and update it more rapidly.

The Rate—Only a Reference Point

When working under the conditions of the second model, the enterprises arrange wages on the basis of existing wage rates and salaries. The new concept of the second model stipulates that money from the unified wage fund is distributed by the council of the labor collective along with the administration of the enterprise on the basis of the difficulty of the work and degree of participation of each structural subdivision (shop, section, brigade, and so forth) in the final results of the activity of the enterprise enterprise. The amount of money due to a specific worker (including the director and his deputies) is determined according to a system developed independently by the enterprise. Wage rates and salaries should serve only as a reference point.

Practical application of the new management methods unquestionably show that a limitation of the wage fund by the normative relationship between the growth of the average wages and labor productivity does not correspond to the logic or the ideology of the second model. The solution can be seen in a correct establishment of taxes on the income of the enterprise and further improvement of income tax on the individual earnings of the workers.

Within the framework of the second model it is necessary to take a different approach to planning and accounting for production outlays. Today the enterprises include the money for wages in the production cost. Money for wages is a part of the cost-accounting income received by the enterprise and not a production outlay.

Therefore, on the basis of principles for the formation and distribution of income, it is suggested when planning and accounting for the production cost that they do not use calculation items of expenditures and apply only elements of expenditures. The calculation of expenditures per unit of output should be done in the following way: direct material expenditures are included in each unit of output (based on established expenditure norms). All other material expenditures and expenditures in the same category are calculated in proportion to the direct material expenditures.

Under the new conditions the structure and content of the balance of the activity of the enterprise should change completely in connection with the new non-normative concept of circulating capital of the enterprise and the introduction of a single running bank account for all kinds of activities.

Realizing these proposals, in our opinion, will contribute to closer coordination of the incomes of the collective with the final results of management and further increase in the effectiveness of production.

Organization, Principles of Intersectoral State Association Explained

18200173 Moscow SOTSIALISTICHESKIY TRUD in Russian No 11, Dec 88 pp 7-12

[Article by A. Marach and Yu. Konovalov: "A Soviet Consortium Operates"; passages in boldface as published]

[Text] Perestroyka needs the aggressive viewpoint of a maximum number of its opponents. A large-scale counter-initiative can be especially useful when some state decision is adopted. In Leningrad the proposal of a group of machinebuilding enterprises and organizations to create an intersectoral state association (MGO) Energomash was a counter-initiative of this nature.

The participants of the Energomash MGO (mostly these are large enterprises of two branches of industry—electrical equipment and heavy machinebuilding—and the appropriate institutes) joined together on a voluntary basis at the decision of their collectives. Our overall purpose is to realize in practice the USSR Statute on the State Enterprise and to organize and perform joint work to avoid excessive administration by decree and excessive coordination, and to find the road to bold economic flexibility, economic methods of control, self- management, and complete responsibility of the working collectives for the results of their activity.

The enterprises and organizations that make up Energomash were withdrawn from their branches of industry. They themselves form the collegial board of the MGO and the management body under the board. Our principal aims are successful solution of national-economic tasks and the development of our own potential on the basis of direct ties, the best use of resources, and the application of flexible, primarily economic, forms of administration. The MGO has the potential for developing its own infrastructure, executing external economic activity authoritatively, training and motivating skilled personnel, developing and executing a unified engineering policy, and outfitting large national-economic facilities turnkey style.

The MGO is a new organizational structure which meets the requirements of the Statute on the State Enterprise, the principles of self-financing and self-reimbursement, and democratization of the process of the adoption of economic decisions and the self-management of laboring collectives.

The first MGO's were created (simultaneously with ours, an association formed by a group of chemical enterprises and organizations—Tekhnokhim—appeared) and much preparatory work was done jointly with central economic organs and the Buro of the USSR Council of Ministers for Machinebuilding. The first steps in practical activity, which determined our relationships with agencies and central organizations and made them more specific, have been taken.

As should have been expected, these relationships are complicated and ambiguous, just like the positions themselves of agencies during perestroyka. USSR Promstroybank [Bank for Industrial Construction] uses the potential of our association energetically and usefully for banking matters. The Buro of the USSR Council of Ministers for Machinebuilding and USSR Goskomtrud [State Committee for Labor and Social Problems] are taking up a creative and fruitful position. USSR Gosplan and USSR Minfin [Ministry of Finance] display an understanding of our tasks and actively support the MGO. We have not broken off constructive relations with the ministries of the industrial branches.

At present USSR Gossnab shows the least understanding of the MGO, at a time when its concerned support for us is extraordinarily important. However, both sides are seeking, and hope to develop, a common platform.

Basic Principles of the Creation and Activity of the MGO

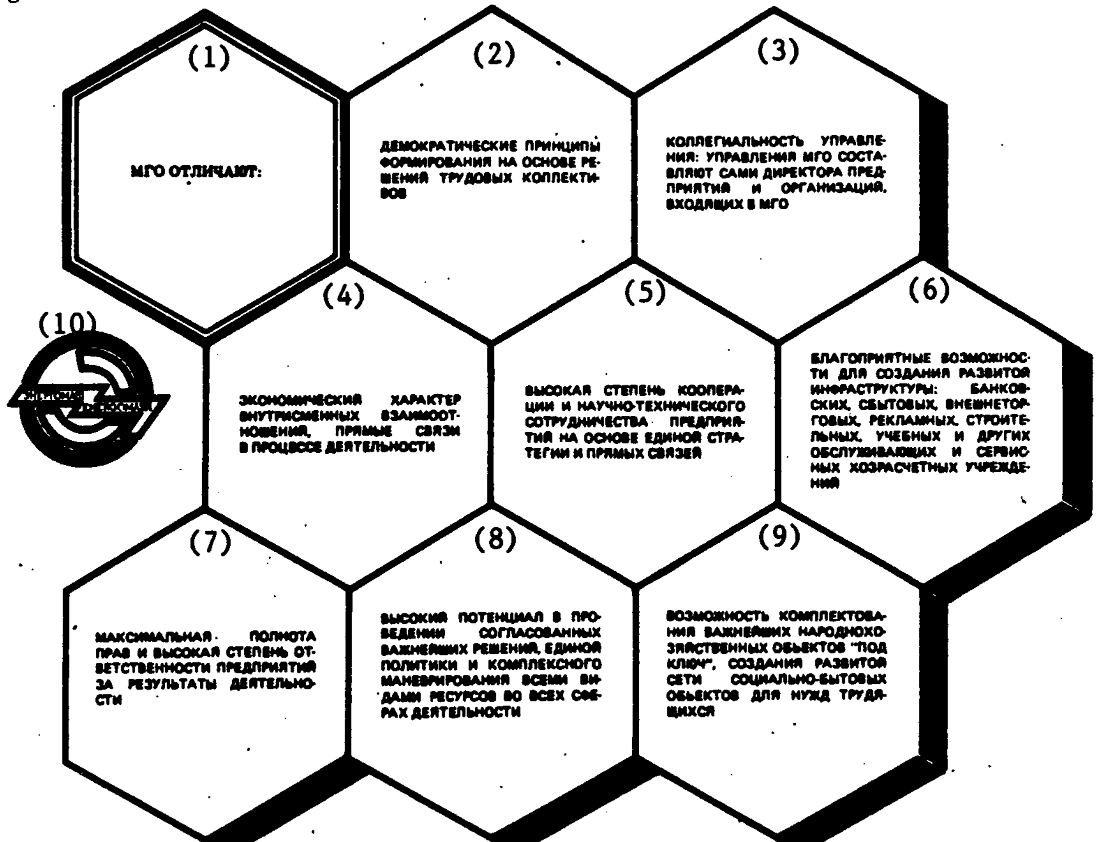
Based on the example of one of the first domestic intersectoral associations—Energomash MGO, which includes 16 Leningrad associations, enterprises and organizations mainly from two machinebuilding ministries—detailed instruction apparently will also be organized for those who want to use its useful experience. This publication cites only the basic principles for the formation and operation of this MGO. They are as follows.

All the enterprises and organizations that make up the MGO have left the branch-of-industry ministries to which they belonged previously.

In the MGO, the traditional higher organ over enterprises and organizations that have been united has not been established. Replacing it is the MGO board, which includes the managers themselves of the enterprises and organizations that belong to the association. Even the chairman of the board, who is at the same time manager of one of the enterprises, is not released from his responsibilities for his formerjob. He is chosen by a secret vote for a term stipulated by the board. Decisions by the board are considered to have been adopted only with the consent of all board members (not by a majority of it). In any case, it has been defined this way for the first phase.

Enterprises and organizations that belong to the MGO perform their science-and-production, economic and socio-economic activity independently to the maximum: with their own resources they organize and perform capital construction, make preparations for and give

Advantages of the MGO [Intersectoral State Association] as a New Organizational Structure for Control in Industry

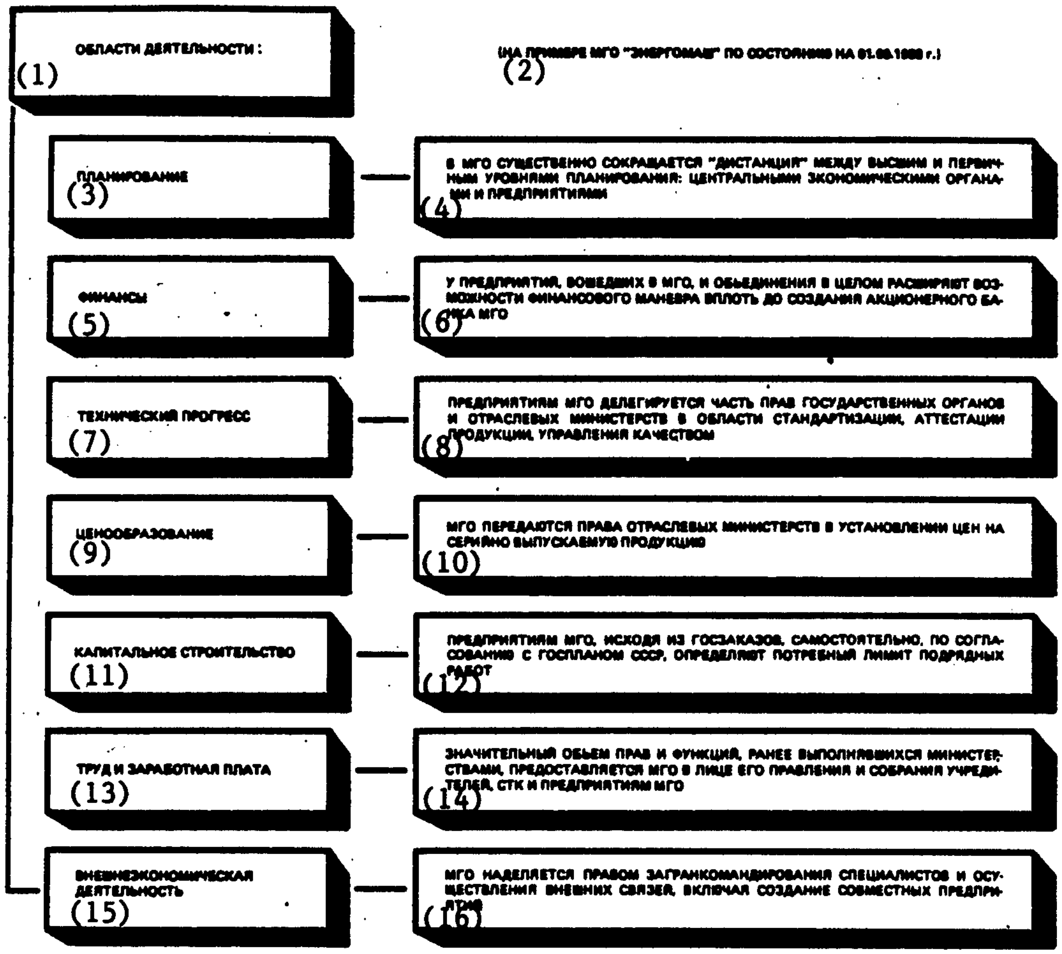


Key:
1. The MGO is distinguished by:
2. Democratic principles of formation, based on decisions of the working collectives
3. Collegiality of management: the MGO management comprises the directors themselves of the enterprises and organizations that make up the MGO
4. The economic nature of intrashift mutual relations and direct ties during the process of the activity
5. A high degree of cooperation and of scientific and technical collaboration of enterprises, based on a single strategy and direct ties
6. Favorable possibilities for creating a developed infrastructure: economically accountable banking, marketing, foreign-trade, advertising, construction, training and other maintenance and servicing organizations
7. Maximal fullness of rights and a high degree of responsibility of enterprises for the results of the activity
8. A high potential for executing most important agreed-on decisions, a single policy, and comprehensive flexibility for all types of resources in all spheres of activity
9. The possibility of outfitting most- important national-economic facilities turnkey style and of creating a developed network of social and domestic-services facilities for the workers' needs
10. Energomash

material support to production work, arrange for direct ties with the suppliers of materials and customers for their output, do reequipping, plan and implement measures for accelerating engineering progress and environmental preservation, independently organize the planning, personnel, financing, marketing and accounting activities, introduce economic accountability, perfect the organization and pay of labor and perfect the information-and-complaint and foreign-trade activities, and solve problems of management and other spheres of their work in accordance with the legislation.

The board, to which a lightly manned management body has been subordinated, discusses and confirms only the most important decisions: coordinated development of the enterprises, selection of a unified engineering policy, radical intensification of specialization and the development of cooperation, the forming and disbursing of centralized and reserve funds, strategic evaluation of the financial situation, change in the composition of the MGO, and the creation of production facilities, service organizations and institutions, social and domestic-services facilities, and training and other centers that are used jointly. State orders, standards and ceilings that

Some Basic Solutions for the Main Functions of the MGO's Activity



Key:
1. Area of activity
2. (In the example of the Energomash MGO as of 1 September 1988)
3. Planning
4. In the MGO the "distance" between higher and primary levels of planning—central economic organs and enterprises—is shortened considerably
5. Finance
6. The potential for financing flexibility of enterprises that make up the MGO and the association as a whole is expanded, right up to the creation of a commercial bank
7. Technical progress
8. MGO enterprises are delegated a portion of the rights of state organs and branch-of-industry ministries in the area of standardization, certification of output, and quality control
9. Price-setting
10. The rights of industrial ministries to set prices on serially produced output is given to the MGO
11. Capital construction
12. Based upon state orders, MGO enterprises determine independently, in coordination with USSR Gosplan, the necessary ceiling for contract work
13. Labor and wages
14. A substantial number of rights and functions previously carried out by the ministries are granted to the MGO in the form of its board and the meeting of the founders and to the STK's [laboring collective councils] and enterprises of the MGO
15. Foreign economic activity
16. The MGO is given the right for foreign travel of specialists and for executing foreign communications, including the creation of joint enterprises

have been coordinated with USSR Gosplan and other central agencies are conveyed to the enterprises by decision of the MGO's board.

The external ties of the MGO and its status within the country's economy, its procedure for mutual action with central and regional organs, and its authority and responsibility are set by the Model Statute on Intersectoral State Associations, which was approved by the USSR Council of Ministers. MGO's are created in accordance with a decree of the council of ministers of the USSR or of the Union republic, which also simultaneously determines the procedure for the withdrawal of MGO enterprises and organizations from sectoral ministries.

The enterprise (or association), institute, trust, construction or other organization joins the MGO on the basis of a decision by a meeting of the workers' collective. It is its highest organ that delegates a portion of its rights to the MGO board. The MGO's internal activity, in all its diversity, is determined by the MGO Charter, which is confirmed by a meeting of representatives of the working collectives.

Composition of the MGO. In principle the MGO can be formed also as an interregional complex. However, making it up from enterprises and organizations of a single region is preferable. This, in particular, creates the best conditions for active help on the part of soviet and party organizations of Gossnab and Gosstandart [State Committee for Standards] and of construction, transport, educational and other institutions in the region in the solution of problems that arise.

An interregional composition of the MGO, as experience in preparatory work on creating Energomash MGO has indicated, can be desirable when the question of providing for maximal completeness of outfitting of MGO output comes up. For example, full outfitting by in-house forces of such facilities as domestic and foreign electric-power stations and outfitted deliveries to other large facilities or construction projects.

But an interregional composition, as Energomash's experience indicates, inevitably leads to complication of administration of MGO subunits and deprives the system of proper flexibility and maneuverability.

It should be considered that, for the financial condition of the system and the active realization of all its richest potential for cooperation in resources, technology, construction, storage, personnel, information, foreign-economic matters, transport, repair and so on, a regional concentration of MGO enterprises can be even a decisive factor in achieving maximal rates of development and in obtaining high economic results.

In summing up the most basic practical lessons in determining the composition of Leningrad's Energomash MGO, primarily the following must be dwelt upon:

—the MGO includes large, organizationally and technically developed production associations that have strong economic ties and mutual cooperation and experience in outfitted deliveries;

—practically all the production associations that belong to Energomash MGO have in-house design and scientific-research institutes and design bureaus, which provide an adequate research and design potential;

—the MGO includes high-capacity branch-of-industry technological and construction-design institutes that are called upon to insure its technological development and rebuilding; and

—it is proposed that in the future the MGO structure will include a plant for nonstandard equipment, an in-house construction trust, transport and storage enterprises, and a training center.

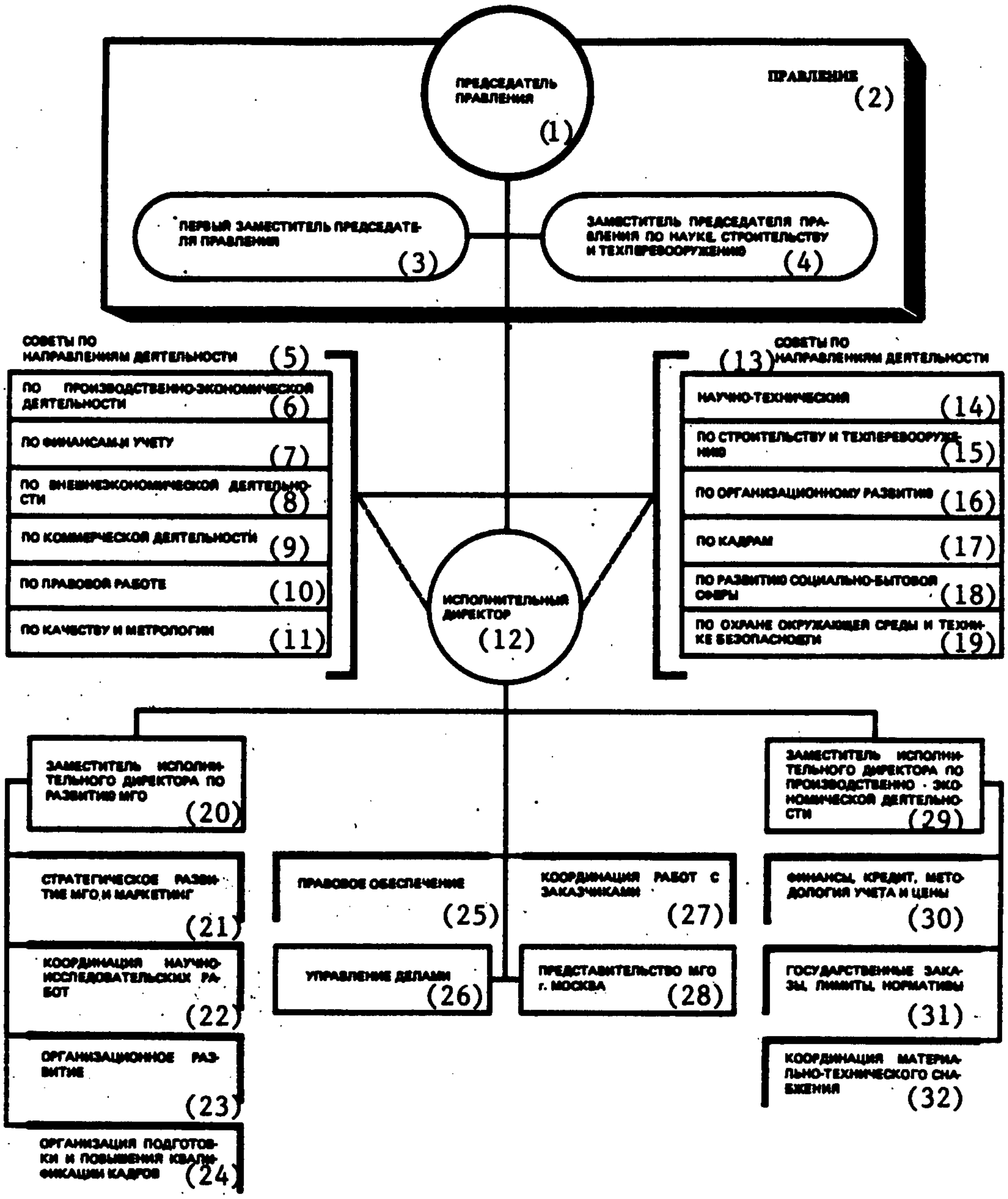
It is considered possible to create a division of Promstroybank which serves the MGO, a specialized supply institution which is made a part of the system of USSR Gossnab's Leningrad Regional Administration and which serves Energomash on the bases of economic accountability and long-term agreements.

Organizational Structure of the Energomash MGO. Some solutions for intracompany administration of the complex. The diagram shows the principle of forming the MGO's board from the supervisors of the enterprises and organizations that comprise it.

The absence of a higher central organ and the corresponding vertical tie that signifies administrative subordination, as well as the existence of a chairman of the board who is not over it but is a component of this collegial organ (see the diagram), practically excludes the command approach and guarantees democratic development of collegial solutions.

The executive management of the MGO and its supervisor, as the structural diagram shows graphically, is subordinate to the board. They are not over the enterprises. This means that the executive management body does not have administrative rights in regard to the enterprises. Such rights of the body can be stipulated only by special decision of the board. But these rights are established for a definite period and touch on specific questions in one area or another of the complex's activity. The board, that is, the directors themselves of the enterprises, which comes into contact with the executive management body, determines not only the structure and functions of the body (see the diagram), but also its staffing schedule, terms for pay and bonus awarding, the granting of social privileges, and the advancement of its workers.

Back at the stage of creation of the MGO, the solutions that were adopted and coordinated with the USSR



Council of Ministers have enabled the staff of the executive management body to be manned only from among experienced experts, who are assigned only minimal technical personnel for assistance. In order to prevent transformation of the apparatus of this system into a "ministry," it was decided, for example, that the MGO will not submit consolidated statistical reports, rigidly monitor pay, or replace the enterprise in matters of the ecology, work safety, supply support, reequipping, the forming of economic incentive funds, and structural, personnel and other matters that are assigned to enterprises by legislation.

In order to avoid innumerable coordinations and ratifications, certain rights of ministries and agencies have been tranferred to the MGO board and, partially, to its enterprises. For example, rights in regard to the cancellation of obsolete standards, certification of output, approval of lists of facilities that are built with MGO resources, the establishment of various norms for the consumption of resources, determination and confirmation of wholesale prices for serially produced items, and so on.

Because of the departure of the MGO's enterprises from the branch-of- industry ministries, many rights in the area of work organization and wages that previously belonged to ministries will be transferred to the councils of workers collectives (STK's) of enterprises. A decision,

Key:
1. Chairman of the board
2. The board
3. First deputy chairman of the board
4. Deputy chairman of the board for science, construction and reequipping
5. Councils on areas of activity
6. For production and economic activity
7. For finances and accounting
8. For foreign economic activity
9. For commercial activity
10. For legal work
11. For quality and metrology
12. Executive director
13. Councils on areas of activity
14. Scientific and technical
15. For construction and reequipping with machinery
16. For organizational development
17. For personnel
18. For development of the social and domestic- services sphere
19. For protection of the environment and work safety
20. Deputy executive director for development of the MGO
21. Strategic development of the MGO and marketing
22. Coordination of scientific research
23. Organizational development
24. Organization of training and raising the skill levels of personnel
25. Legal support
26. Administrative affairs
27. Coordination of operations with clients
28. Office of the MGO's representative in Moscow
29 Deputy executive director for production and economic activity
30. Financing, credit and methodology for accounting and prices
31. State orders, ceilings, and standards
32. Coordination of the supplying of materials and equipment

in accordance with which the STK's will become the competent authority for approving job descriptions for specialists' and white-collar workers' posts, has been adopted. They will determine, for submission to the administration, the lists of operations and work places at which the established additional pay that is related to working conditions will be used.

Salaries and terms for awarding bonuses for those vocations and posts for which they have not been approved in the prescribed procedure will be determined by the supervisors of MGO enterprises in accordance with an agreement with the STK. They have been given the right to approve the list of especially complicated and powerful, highly productive machines and production facilities, for working at which the rates of workers will be raised.

The MGO's board in turn approves, based upon general principles, indicators for assigning MGO enterprises to the appropriate categories for payment for work. The highest organ of the MGO board—the meeting of representatives of laboring collectives—has been given the right temporarily to transfer supervisory workers to a lower pay group if the association, enterprise or organization under them systematically fails to carry out basic plan tasks or produces low-quality output.

During the creation of the first MGO, many questions about their activity were solved, the solutions being nontraditional and bold, with an eye to the long term.

***

Intersectoral state associations, which are distinguished radically from all previously used forms of organization of the primary element of industry (socialist consortia, in essence) are beginning to operate. They undoubtedly have good prospects and a large, still-undiscovered, potential. But it is very important, especially at first, to create around these associations a climate of the greatest favorableness, since their organizational principles flow organically from a large number of the key principles of perestroyka and in practice signify a departure from administrative-command management in favor of economic methods and self-control.

Poor Performance Tied to Central Price-Setting, State Monopoly

18200114a Moscow LITERATURNAYA GAZETA in Russian 14 Dec 88 p 10

[Article by Aleksandr Levikov: "Price and Market: How To Overcome the Abundance of Deficit"]

[Text] We have already written about how they broke the neck of the NEP, rooted out cooperation, and suffocated the syndicates that were just barely getting started. Less has been said about the figures who were educated by this process: the resident who hates everything having to do with the market and commerce—from generation to generation he has been stuffed with films and adventure stories in which smooth-faced brave lads, taking aim in an NEP restaurant, have hunted down well-fed monopolist rogues who identify themselves, like Lyudovik, with the state; a dogmatist whose life is like proof of the "advantages of planned development" and "clear indicators of the decaying of capitalism."

The upstart economists have not read their colleagues who were discredited during the 1930's and who have a foggy idea of those who after the war were ostracized during the course of the discussions that culminated in

"Economic Problems of Socialism in the USSR," that Stalinist bible that pounded the last nail into the concept of the market. But it was discovered that this was not the last nail! Later the nails were smaller but there were many hammers and they pounded deafeningly. "Pounded"—an appropriate word.

The book by Gennadiy Lisichkin, "The Plan in the Market," evoked an outburst of public emotions during the 1960's. The enthusiasm came from "graduate students" and had no force, while the perturbation came from the leadership and was threatening: it was regarded as departure from ideology. Lisichkin's work and he himself were long under suspicion. I recall well how Alla Zholnina, an intelligent and honest editor of the publishing house "Sovetskaya Rossiya," an attractive woman, whose bitter fate it was to die while she was young, in the 1970's was still forced to save the next book by Lisichkin, "What Does a Person Need"? It was brought out quietly, outside the plan, and made it through the editorial readings fine—Alla provided for this, she bypassed the imposition stage, the signal copy slipped through and the book ended up in a warehouse.... But here a catastrophe developed. Somebody sniffed it out and pounded on the doors of the censors—they confiscated the edition! The publishing house went into a panic. Alla went to the Central Committee, to an assistant she knew. Imagine—she managed the impossible: the book was published. Reading it over now, I am amazed—what was there to confiscate? It is a good work of a commentator, but even for those times there is nothing especially criminal in it. It was the name that was important here, the name! Lisichkin with his "market" sympathies was like a red cape for the dogmatic bulls.

Now the situation is different. Commodity-monetary relations are recognized in party documents. But what follows from this recognition? Are we prepared in restructuring the society to revise the economic essence of socialism as well? To adopt the market system with all of its consequences? Many fall silent when the question is put openly, although it is disturbing everyone now—both simple mortals and scholars and leaders of the national economy: will the market economy be socialist? If not, "What have we been fighting for?" If so, how?

The answer depends on what you mean by socialism. With an economic system that is based mainly on state ownership and control by methods of all kinds of state regulation, the market is actually about as compatible as ice is with fire. But yet this is the idea that lay at the basis of the theory of scientific socialism! Its founders, including V. I. Lenin, spoke out against commodity-monetary relations. The turn in the direction of these in 1921 caused alarm in the minds of many of the most "orthodox" Marxists and disorder in the party. Lenin said that the NEP was being introduced seriously and for a long time, but the majority saw in it a temporary deviation, a concession to the private owner and merchant brought about by the desperate situation on the farms, peasant uprisings, and the Kronstadt mutinies. This is why Stalin managed to suppress the NEP: the strategic ideas of cooperation formulated in Lenin's well-known article—alas, too late!—were not then assimilated by public awareness and a revulsion for the market seemed to be a natural feeling of the revolutionary.

The years of Stalinism and stagnation helped this pure feeling to bloom into a magnificent flower and now just try to explain that our salvation lies in the transition to a market economy and that this is by no means a "selling out of socialism." How slowly, how gradually we see the light! "Entire sciences have been called 'bourgeois' (genetics, cybernetics, sociology) and we have refused to recognize socialist profit: we have feared the word 'competition' like the plague. But now we have come to the point of having stocks and stockholders. But what is the point of having stocks without stockholding companies and without a stock exchange? I think that we will also get to them. And we are seriously recognizing the possibility of bankruptcy and creating a legal procedure for it. And in the end we will agree about the price: it can be nothing other than the price of supply and demand that provides for a market balance. It is terrifying to think that we will go as far as having competition among various owners in our market, and not only representatives of a single owner, the state, for whom "competing" with one another is the same as a person trading with himself.

And without this if socialism changes its image the market will not curse it but will rather embellish it and offer us an abundance of good commodities and bring us up to a worthy standard of living. The fact that we are now among the first in terms of disease and death rate and among the last among civilized states in terms of quality of life and buying power should make us finally take a sober look at ourselves!

Not a single country that is oriented mainly toward state ownership and a centralized plan has held its own in the economic competition with countries that follow the market system. Whether we like to admit it or not, such is the reality. They are not catching up with us but we are catching up with them, and in very many respects. Frequently people think that at least we are constructing more housing, but this is not so: in our country we are constructing 130 million square meters a year, and in the United States—260 million, in our country there are 15 square meters of usable space per person, and in the United States—49. We spend 2 percent of our gross output on housing construction, and the Americans, with a much greater abundance of it, spend almost 4 percent. A market economy that is based on the vital interests of the owners has turned out to be much more mobile, thrifty, versatile and dynamic than ours. How can we not turn to the market?

But there they have owners, I am told, and what about our country?! In our home-grown market, who will do the trading—a private owner?! Yes, he will be the one,

but not as a ruling figure. An owner does not necessarily have to be a private owner—this is what is important to understand! An owner can be collective. No members of collectives in their present forms, together with individual labor can save state enterprises and allow them to pull themselves up by their bootstraps—they only prolong the agony.

The discussion that has filled the pages of the press has aggravated this issue. The authors have heaped information about price increases on the timid reader (who is well aware of this anyway from his own pocketbook). They have proved that the price index does not reflect the real situation; all they need to do is change the ribbon and bow and declare the product "new"—and sell it at a higher price. "What reason have we to believe that the 'price reform' will not dupe us in a similar way?"—asked Andrey Nuykin in OGONEK, when tracing the chain from the increased cost of fuel and raw material—through machines and equipment—to our "soup bowl." He asked and begged for them not to have another increase under the cover of "eliminating disproportions and distortions." When inflation raises prices, are these entreaties not similar to requests to seal up more tightly the windows in a house whose roof has already been ripped off by a hurricane?

The discussion has cast doubt on the arguments of proponents of increasing food costs who hope to relieve the budget of subsidies to agriculture and to compensate for losses to the population by increments to wages, pensions, stipends and so forth. I shall not repeat the objections expressed regarding this in the newspapers and magazines, including in LG (the last time—at the "round table" on 9 November of this year, "Reform—Not Pro Forma"). But I shall note that many authors of polemical articles, even the most quarrelsome, have regarded the problem from the traditional, completely bureaucratic viewpoint: prices, they say, are established and should be established by the state and it is necessary to demand that the state not increase them and that it keep cooperative members and private owners in check. A more interesting argument (the press did not pick up on it) was offered in ZNAMYA by Otto Latsis, who was discussing the "price of balance": this is the sum for which "the commodity can actually be purchased always and everywhere" and not that which the "State Committee for Prices writes in the price list."

The path to solving the price problem runs through the market—this idea was also heard in the "Position" Club of the Council on Essays, Commentary and Documentary Prose of the Moscow Writers Union where I had occasion to chair. The shorthand report was not published, but here are a couple of excerpts from it.

S. Nikitin (doctor of economic sciences, Institute of World Economics and International Relations of the USSR Academy of Sciences). There exists a legend that we have less expensive food. But in a comparison with a market economy, we do not come out ahead. Our worker must work 1.5 times more than does a worker in the FRG in order to obtain a kilogram of beef, twice as much to purchase pork, and in order to acquire the same quantity of broiling chickens, he must work 14 times as much as an American does. They do not like for these kinds of measurements to become widespread, and compare prices in monetary terms which, of course, distorts the picture.

L. Yevenko (doctor of economic sciences, Institute of the United States and Canada of the USSR Academy of Sciences). I am in favor of balanced prices. Is there really anyone who is still convinced that it is possible to construct an optimal plan from which one can automatically derive "scientifically substantiated" prices? Our best minds have developed such models, and have been awarded the highest honors, but all this is, excuse me, technocratic utopia. I have visited the West and I know how a consumer with a modest surplus feels in a balanced—market—economy. When a person buys sausage for music, when an artist tries on a coat for a screen test, can this be compared with the psychological and physical sufferings we experience in our stores? Depriving a person of the freedom to select a commodity is in a broader sense depriving him of freedom; it is not solely an economic problem. How do we get rid of the deficit that is strangling us? First of all, we must get rid of the illusion of "scientific price setting." Comrades from the State Committee for Prices, are you really able to take all expenditures into account? Average, branch, individual? Can you calculate all the consequences for the national economy when you put one price or another on the price tag? Do you know the curve: how the actual price changes when there is a change in demand or what the profit norm should be? Are you able to do all this? Glushkov, former chairman of the State Committee for Prices, prided himself on the fact that he established 200,000 prices a year. In reality he was endorsing his committee's irrational behavior. The objective essence of the price can be understood only in a decentralized way. It must be transformed into an act of comparison of the interests which is confirmed by buying and selling. We need an agency that will construct a price-setting system and will think about the price policy but does not have the authority to raise or lower prices, with the exception of certain "structure-forming" ones. The current State Committee for Prices, do excuse me, I would eliminate and transform into a Commission for Price Policy. Is a market impossible with a monopoly of the producer? Of course! But who said that we must have competition?...

D. Shavishvili (candidate of economic sciences, Scientific Research Institute of Prices of the USSR State Committee for Prices). The Chinese are getting ahead of us, and they have taken the path of the market. We developed commodity-monetary relations in 1928. And what happened? By 1932 our actual wages had decreased by 20 percent, and by 1940 retail prices exceeded the NEP level by a factor of 6. Let us take the most recent time when the market was no longer mentioned. The

24th CPSU Congress proclaimed the stability of state retail prices, but just a couple of years later commodities for cultural and domestic purposes were continuing to increase in cost and in 1981 had exceeded the prices by 15 billion. We had made a big mistake, and it was necessary at that time not to raise prices but to conduct a reform. The social situation was less difficult; now it is not simple. The worker in our country receives an average of 6 rubles 70 kopecks a day, the kolkhoz worker—5 rubles 60 kopecks, and the pensioner—2 rubles, 20 kopecks. But how much is a ruble worth now? What is its buying power? In 1985, the ruble was equal to 54 kopecks as compared to the ruble of the 1960's, and now it is even less. When people tell me that our average wage is 196 rubles, I know that this is not significant. Taking inflation into account, it corresponds to approximately 101 rubles during the 1960's, when it was 60 rubles. We have grabbed onto prices and made a big fuss in the press—to raise them or not to raise them, what should the compensation be. But we cannot solve the wage problem through prices! Why are we not seriously discussing the lack of order here, why are we not sounding the alarm concerning the fact that our public funds are not working? For the standard of living has to do with this as well and not just prices. First of all, we must straighten out the concept of the economy. If we have selected the commodity-monetary direction, the market, there is one idea of prices, but if we have taken the opposite variant—it is an altogether different idea....

O. Bogomolov (academician, director of the Institute of Economics of the World Socialist System of the USSR Academy of Sciences). Everyone should ask himself whether he wants to get rid of waiting lines, shortages and speculation. Does he want the consumer market to be healthier? This goal cannot be achieved by the method of "change nothing." A disparity between revenues and payments has formed in the budget. If we do not close this but maintain present prices, the population will suffer a great deal. For them emission will be inevitable—printing monetary notes that are not backed up by commodities. This is an indirect tax on all of us: the ruble is devalued, the money leaves our pockets. Inflation can have various faces. In Yugoslavia it looked quite different: prices increase but there are still plenty of very high-quality goods everywhere. In our country inflation manifests itself in the form of a shortage of goods, and this is the most dangerous, concealed form, and at the same time there is galloping inflation in the country. We must comprehensively improve monetary circulation and change certain price ratios—this is also a necessary measure, but our primary task is to increase the supply of good commodities, and agriculture is the key to everything here. A rejection of dogmas and radical changes in relations between the state and producer of the goods—this is what will help saturate the market quickly. One can assert that in this case even with the same wages the standard of living of the population will increase by a factor of 1.5: there will be efficient consumption, and we shall stop overpaying and giving up our money for poor-quality things.

V. Belkin (doctor of economic sciences, Commission of the USSR Academy of Sciences for Studying Productive Forces and Natural Resources). The authors of the reform of the 1960's, including myself, thought that the price was a reference point, but now we think that it is a regulator. Views have changed. We were afraid of the very concept of "market socialism," and now we are discussing paths to it. The initial position: we are living poorly and still not within our means. Our economy is ineffective and wasteful. But it cannot be corrected by increasing prices—this deals a blow to restructuring. Prices are so unbalanced that they can be affected only by an explosion, and we are sick to death of explosions. It is better to act cautiously. What is the point in being oriented toward today's outlays of agriculture? We must work well under the conditions of the family and rental contract in order to imagine what the prices for meat will actually be. I think that they will be not 6, not 5 and not 4 rubles, but in some places between 2 and 3 rubles. This will cover expenditures and produce a profit. Only with a good market will we obtain a balanced economy. Stalin destroyed the balance after having gotten rid of all proponents of it and since that time our awareness has been fed with the notion that market balance stands in contradiction to rates. Do you know when we had the highest growth rates? Not during the years of industrialization and not during the period of postwar restoration. No! It was during the short period of balance and equilibrium, during the 1920's, during the time of the NEP, when industry and agriculture quadrupled. And during the first five-year plan industry tripled, but then agriculture fell back by a factor of 1.5. But we should not be thinking about rates now and we should not be thinking about machine building; we should be thinking about creating a market for means of production and consumer goods. Balance in and of itself is the greatest economic value....

Now that the next economic reform is on the skids, one hears demands to retrace our steps: first in one article and then in another you run up against fear of the market, the phantom of private property. Dogmatists keep the ideological truth. But even serious economists have been opponents of the market because of the unsuccessful, in their opinion, reform experiments in a number of socialist countries, especially Hungary. They have heard of the difficulties there and exclaim: see where this leads; this is not our path, not ours! It is worth discussing, but let us put it off a bit. I recently returned from Hungary, and hoped to tell the readers how the Hungarians themselves evaluate the situation and why now, having called their reforms inadequate, they are changing over to a market economy.

As concerns our reform, it is being held up by timidity and a lack of confidence: the market is necessary, but it is impossible to change over to it without wholesale trade; wholesale trade is necessary, but it cannot be organized without the market; the price reform is doomed without a market and the market is ruled out with the current chaos in prices.... A vicious circle and all

one can do is sit and wait: everything will clear up. There are no miracles. I think the market itself will give warning of lack of coordination and deviations and will suggest where and what needs to be regulated. And we must determine finally whether we want it or not. What does our reformist zeal hunger for—what system of ownership, which economic model of socialism?

The need for wholesale trade is clear to everyone, but we will not discuss other components of the market: the nature of the owner operating in it, the market for capital which includes securities, the market for labor, the nature of possible competition in our country, the expedient degree of allowance of foreign capital, the limits of private entrepreneurship and the scope of cooperation, the possibility of joining various owners into stockholding companies, or the legal guarantees of economic freedom on the market. There is no overall concept of a socialist market and, moreover, there is no scientific theory of market socialism.

Most frequently one reads about "the need to construct a system of mechanisms that provide for a combination of interests," about the "comprehensive approach," about the "program thinking".... The words fly easily from the tongue and the end of the pen, the ears have long paid no attention, and the brain does not register them. Something similar was being muttered decades ago, and relatively recently as well. I am not referring to those who criticize economists out of a bad tradition without noting a contribution to the development of the current reform. But I should like to exclaim after the playwright: farther, farther, farther!

In my opinion, the market is incompatible with monopolizing state property. I was disenchanted with the article entitled "Causes and Effects" by Sergey Andreyev in the magazine URAL, which became so widely known. Making an excursion into history, the author shows that Lenin did not manage to overcome bureaucratism, that Stalin unsuccessfully tried to burn bureaucratism with the white-hot iron of terror (here Andreyev is clearly romanticizing the dictator's actions, ascribing to him a noble mission, although with monstrous methods: we know what Stalin was "fighting against" (!), that Khrushchev's antibureaucatic project produced nothing, and that the bureaucracy became stronger under Brezhnev. And now the time has come, according to the author, for the party and state to deal a crushing blow to bureaucratism and destroy it "as a class." He sees three forces, two of which should constrain the third. They would have done it long ago if the situation were right! But the essence of the matter is that in the economy direct party-state control itself is also bureaucratism. Whom can it fight against and how can it defeat itself?

I see the solution in a socialist market where, with certain exceptions ("defense," especially important productions) collective owners or renters interact independently of the state. Most of the enterprises and associations that produce consumer goods could become cooperative. Of course these would not be the kind of cooperatives we see now, but solid factories and firms that are capable of fighting against one another for the consumer. Along with them on the market there could be small cooperatives, private owners, and also renter enterprises.

We need a law that permits rental scientific and technical associations, rental firms and plants, not excluding, of course, machine building. Why not automotive, radio equipment, and other kinds of plants?

My colleague asked: And who will determine the rental periods? Who has a right to extend or abolish them depending on the circumstances? Who will name these circumstances? The same bureaucrats? They will determine them! I answered: the owner will decide, and only him, nobody else. If you lease an apartment or a dacha, nobody has the right to tell you what to do when the contract expires. When the ownership is public, the renter will be dealing with the legal representative: the local soviet, the republic government, or authorized union agencies. The law should not only stipulate the time periods for the agreements but also the rights of the renter, and also his obligation to add to public wealth by investing some of the profit in the renewal of the enterprise. So that there will something left for those who follows.

The state sector (in its present form) should be trimmed down in the market and deprived of monopolistic privileges. Let it compete with the others. Do we need branch ministries? Only a couple instead of the dozens that exist today with their various functions: clients without the right to operationally manage production. The authorities would determine the social policy, structural proportions, and legislative framework, collect taxes, and submit orders.... Everything else would be left to market technology: competition, wholesale trade, bank credit, balances prices...and nobody is more important than the Consumer. He is the absolute monarch!

Is this not Manilov-like behavior? Let us look at life.

At its last conference the party rejected taking direct command in the economy.... In Leningrad they created nondepartmental concerns that are not under the jurisdiction of the ministry.... The number of plants of the construction industry and a large Moscow plant for low-voltage equipment which had doubled labor productivity in a short period of time or transferred to cooperatives.... Here and there one finds rental, joint stock, and contracting forms of ownership.... There are firms with mixed Soviet and foreign capital.... What is this? Can it be that on a path to the goal which we do not clearly recognize yet, we do not dare to state plainly: market socialism? You cannot stay on the road with blinders on....

We have pushed off from the command-administrative shore and we must row toward the opposite one. If we get

bogged down in the middle, we risk not staying afloat. In strictly centralized planning and total control over everything and anything which is intended, frankly, to maintain fear, there was, if you were, its own kind of logic. This kind of management is ineffective but it is possible to maintain relative order. There is also a kind of logic in the market system where the activity stirs up interest. And we are now in between them...a dangerous position. It is possible to tolerate a certain amount of time (brief!) as a transition period, but....

There is another serious problem that cannot be ignored: our public awareness is not prepared for receiving the market economy. Even the beginnings of such a system—the first cooperatives—cause alarm and sometimes hostility in many people. They complain: rogues! As though a large mafia had been discovered in cooperation and not in state trade in recent years. They are dissatisfied: they have inflated the prices! As though the cooperative members—and not the state—determine the majority of prices in the country which have already been creeping upward for many years. They object: they are buying up the goods in the stores! As though on an incomparably large scale—such that it would be enough for all cooperative members for years and years of activity—meat and vegetables are not rotting in state slaughterhouses and bases, are not spoiling during transportation and state trade, and industrial goods of many state enterprises are not a waste of raw material that has been thrown away.

How does one explain the phenomenon of suspicion and lack of confidence in the emerging form? I understand the power monopolists—they do not need competition. (While I was writing these lines the all-union radio broadcast an interview with the leaders of the Belorussian Fruit and Vegetable Base: they were abusing the "cooperative machinators" who have become quite impudent—they pay the population two pennies more for strawberries than the procurement workers do, and they take the sweet berries out from under their noses!) I understand the dogmatists who have lost the meaning of a lived life. One of them, an economist from the city of Bendery, gives me a bit of instruction in a response to a NOVYY MIR essay entitled "Craftsmen": "Levikov cannot but know that handicrafts cooperatives in our country at the end of the 1950's were transformed into state enterprises and that the members disappeared as a class.... He suggests turning back to the clock to the petty bourgeois form, in a direction that is opposite from the final goal of the socialist state: to destroy classes and create a socialist system, a socialist society that is based on unified common ownership of the means of production with the organization of collective production on the scale of the entire society but not through the organization of societies of craftsmen and cooperatives of various kinds."

But the dissatisfaction of honest people and workers cannot be explained by their dogmatic awareness alone. Recently in a television program one of the commentators made a suggestion: they are envious. And he developed this idea: they envy the earnings of the cooperative members, and envy is one of the most harmful human weaknesses that can never be eradicated. It is of course...that a low standard of living and the impossibility of buying anything without combing through the Moscow stores and waiting in lines for many hours—do not these circumstances that are so familiar for us feed the irritation which they would like to ascribe to the genetic imperfection of Homo sapiens?

When popularizing ideas of cooperation we frequently refer to the authority of V. I. Lenin, to whom we resort for essential proof. And the references do not always persuade us. For example, is it worthwhile to think about the simple things that have drowned under the burden of ideological constructs? For example, why has the market system turned out to be stronger than the economy of total state ownership? Is it not because the first appeal to the real living person is an appeal to his natural interests: to work, to buy, to sell...and the second turns to the idealized person who must think in abstract concepts of national property and act as an obedient unit of the capitalist system.

Or another thing: the bottom of the market, the mafia, money-grubbing—they fear this. But is it not true that an essential element of the mafia (not only in Sicily but here too) are the corrupted state structures? The state system in and of itself cannot guarantee to protect people from crookedness, just as the market in and of itself does not cause this. It is rather on the contrary: private owners rarely stick their fingers...into their own pocket. But nonprivate owners are more than happy to dig into the treasury!

The reform activity in the economy involves millions of people, and therefore one inevitably encounters the problem of confidence. Any variants of the price reform that include the idea of increasing the cost of products causes a negative reaction in the majority. They do not even want to hear about it! Otto Latsis explained such conservatism of the mass consciousness by the stereotypes of thinking and the lack of information for the citizens: "False dogma (price stability as an advantage of socialism and means of protecting the interests of the workers in all cases) have been pounded into people's heads quite persistently for dozens of years and the real economic and social processes have begun to be discussed quite recently...." All this is true, but nonetheless the roots of mistrust, in my opinion, lie deeper. Doubts about the good intentions of the price reform are more than a particular case of a lack of confidence.

Until recently did our people always believe everything said in the social sciences, propaganda, and the press? Everything that was said from the tribunals and written in the most important documents, the constitution, for example, did we assume to be unquestionably valid? And did we believe in our electrosystem and the Supreme

Soviet with its petrified ostentatious unanimity? The "approval" was official and false, and personal confidence was lost long ago. Of all the losses of the decades of despotism and stagnation, the loss of confidence was perhaps the most terrible. Without confidence between the rank-and-file citizens and the leadership, the society is "de-energized" to the point of paralysis. Without overcoming the crisis of confidence one cannot even dream about a market. But let us be frank: has this crisis really been surmounted in the 3 years of restructuring?

The discussion about prices has shifted something in the heads of the people. But that is better than not thinking. The cult of the personality is attractive precisely because it relieved people of the obligation to think. Partly for this reason the stagnation was also "good": they moved in an narrow circle but they justified themselves in their own eyes—"we are not responsible." But what will we do if they ask? If they present a draft of a price reform for general discussion. Shall we approve it? Shall we reject it? We can approve it mechanically, as though we were social robots and reject it just as unthinkingly, to the detriment of ourselves and the homeland. Here we shall recall the advantage of discussions.

Let us agree on the main thing: the economy which ignores the law of value is not capable of offering its citizens a selection of goods at appropriate prices. It guarantees only one abundance—of shortage.

Unified Market Advocated To Reduce Inflation

18200141a Moscow OGONEK in Russian No 51, Dec 88 (signed to press 13 Dec 88) pp 9-12

[Article by Yakov Liberman, Doctor of Economic Sciences: "Diagnosis: Inflation"]

[Text] On the causes, symptoms and methods for treating a chronic economic ailment.

The ruble is beginning to occupy a more noticeable place in the economic life of the country. Enterprises are learning how to calculate monetary effectiveness. Consumers are spending money at cooperative and individual trade points. Monetary savings which have accumulated over a period of decades in money-boxes, stockings, mattresses and even in wallets, pockets and bags are rapidly being introduced into economic circulation. Economic life is becoming more lively, greater trust is being placed in money and it is being handled in a more scrupulous manner.

Timely economic measures are producing the initial results.

Is this good? Beyond any doubt. Certainly, we must not close our eyes to the difficulties involved. There are still many such difficulties. Given the existing complicated economic situation, we are concentrating our attention more on monetary inflation. It is depicted as a terrible type of gin that is released from a bottle, with an attempt being made thereafter to return it to its container which is then sealed tightly. The requirement to halt inflation and to adopt urgent anti-inflationary measures (true, no mention is being made of which measures specifically) is becoming more pronounced. In short, an aggravating, frightening and intimidating type of inflation is being created and smart journalists who are not always competent are sounding the alarm with their resonant drums, inciting fear and inflaming passions. In addition, they are calling for combat readiness to take up arms against this impending threat.

What do we have more of here—desperate fright or militant enthusiasm? Emotions still predominate. When you read about this, once again the impression arises that inflation appeared as an unwelcome guest and that it did not exist earlier. Here a vague implication is encountered: this is what was expected and this is the result of perestroyka. It is not necessary to explain: inflation has existed for a long period of time and has been increasing in strength at an accelerated rate since the second half of the 1960's. This is not a new illness but rather an old one that has been neglected and has become chronic. It did not gain a foothold either today or yesterday but rather it has acquired all of the features of stagnation. It was precisely during the period of stagnation and imagined and false super-centralism that monetary circulation burst forth from planned control and regulation and inflation, without dwindling, crept along, gathered speed and broke into a gallop. Compared to today, there was only one difference: at that time, the term "inflation" was strictly forbidden.

The word which was forbidden yesterday has now become stylish. Those who yesterday did not notice inflation and who diligently crossed out the term in a text now speak out more loudly than all others. They do not know what to do. A need exists not only for an analysis and business-like recommendations but also for sharp and strict criticism. And again it becomes necessary to furnish a definition—inflation is an unpleasant but curable illness and, even more important, it is not fatal. I wish least of all to negate the danger and yet I offer the fear of a poor adviser. It is deemed more useful to apply oneself to the unhealthy monetary circulation in all seriousness, but in a calm manner and in the absence of panic which is capable of producing only new complications.

A Bitter and Sad Need

Permit me to begin with definitions (required by a meticulous reader), although they may turn out to be "unexpected." Inflation is the reaction of the market to a surplus amount of money being in circulation. It should be noted that it is not a surplus of and by itself (yes and who weighs it on a pharmaceutical scale?), but rather its reaction to the market: the surplus can be more and the reaction less and conversely. For example, a monetary mass grows by rapid strides and there is no inflation. But let there be a small increase and increase

will grow like a snowball. It would seem that there should be a "critical point." A total expression for inflation—the money becomes cheaper relative to the goods and an exchange (a breaking-up into smaller units) takes place in the monetary scale.

Allow me to immediately cite the opposite reaction of the market—deflation (a shortage of monetary mass). Which is better and which is worse—a reader asks. Either one is fatal, to an identical degree.

A counter question: properly speaking, where is the line of demarcation between inflation and deflation? I hope that the line nevertheless exists and that it is not constant but mobile and changing in nature.

And "unexpected" inflation and deflation proceed hand in hand. They not only alternate from time to time in consistent intervals but quite often they even coexist. This is why, in a large and adequately representative economic auditorium, one only rarely encounters not only simple but similar evaluations for inflation. For all there is the same type of identical money and yet one must look again: the monetary scale for a pensioner with a strong pension "length of service" is not the same as that for a miner, even an elderly one or, for example, in the western oblasts it is not the same as in the Trans-Caucasus. No, by no means does inflation alarm us of and by itself, but rather it does so owing to the fact that it develops in an extremely irregular manner—in both time and space.

I might also note that within the economy importance is attached not so much to instantaneous "Photography" (although at times it appears to be most reliable), but rather to short term changes in their direction. It turns out that inflationary trends are better than deflationary ones. Where do such peculiarities in the complicated economic realities come from? It would be better for us to turn to history and then the abstract considerations would acquire specific meaning.

Inflation is a disease which Russia has endured on more than one occasion. We know from textbooks that money creates for itself a market, commodity turnover and purchase and sales. I would add to this: money and its nominal course has always been a prerogative of the state and its monopoly. Monetary circulation is a most important organ of a market—always (just as now) at the same time servicing the state finances. Monetary emission (it determines the amount of money in circulation) in the hands of the state (even under conditions of free coinage and the issuing of banknotes) has historically been the first form of distribution. Non-market state coercion has resisted the immutable norms of an equivalent market.

The combination of distribution and market provides an explanation for all of the problems in economic development, including monetary inflation. The efforts by Russian autocracy here were no worse than in any other areas.

At the very beginning of World War I, strong inflation overtook the economy and staggered not only the state finances but also the sphere of production. By 1916, all gold, silver and even small coins had disappeared from circulation.

Monetary emission, the usual measure of state regulation, turned out to be ineffective and inadequate. Non-market coercion spread to the sphere of production. In 1916, the czarist government "declared" a food distribution. This was an extraordinary and extreme measure and one which had far-reaching social consequences.

The unified market collapsed and from its wreckage arose a deformed and harmful market—a distribution in which non-economic coercion ruled, one which functioned in opposition to economic interests.

Could such a market aid in moderating inflation? By no means! It only stimulated it further.

This process was carried out completely by the temporary government on 25 March 1917 with the introduction of the state grain trade monopoly and with restraints being imposed upon the trade in other basic necessities. This signified a prohibition on freedom of trade. The "free" and "unrestricted" market became "black," that is, illegal. And instead of disappearing, it went underground.

Distribution, together with its inevitable companion, the black market, placed Soviet authority with its heavy legacy from the past in the same rank with backwardness, general disintegration and economic ruin. V.I. Lenin stated: "Distribution is not the ideal but rather a bitter and sad need."

Distribution As Opposed To The Market

Only NEP [New Economic Policy (1921-1936)] halted the flow of inflation and terminated it for a period of time.

However, NEP was never completed. And today we can only guess as to the results which could have ensued if it had been carried out in a consistent and purposeful manner.

Throughout our entire post-October history, there have been only three spring periods that inspired timid hopes based upon historic turning points—in 1921, 1953 and 1955. On the eve of each of these historic periods—they were divided up into mathematically equal intervals of time in accordance with the whims of history—the economy ended up in a critical crisis situation, in a state of disorganization and inflation.

Why did not each previous historical turning point prevent the following one? One primary reason was the fact that not one of them touched upon or even shaped the system of bureaucratic distribution.

NEP succeeded in terminating (yes and as you can see, only for a period of time) the more offensive type of distribution in the countryside, but not the reserve of other forms of distribution or other elements of its unified, far-flung and complete system—particularly a distribution of prices (procurement and retail) and real distribution (card distribution of food goods) in cities. These forms, with these or other modifications and including a standardized real distribution, are still continuing to this day. An extensive sub-system for distribution, which has continued up to the present day, has succeeded in developing further in the socialized state sector—from a distribution of real deliveries and financial payments to a distribution for logistical supply, capital investments and subsidies.

Today we are confronted by a unified, multi-purpose and total system of distribution, with certain immaterial changes—non-economic coercion based upon a non-equivalent and at times even a non-monetary distribution of products and resources, deliveries and supply, prices and income, profit and subsidies. If we single out and destroy a particular element, perhaps even the worst, leaving the system as a whole untouched, it will invariably revive in its entirety and at best only slightly changed. If one element creates excessive distortions in the economy, they are corrected by opposite distortions in another element—thus an unsuccessful distribution of wholesale prices is always corrected by a distribution of income and subsidies. Everything is adjusted within the system and there cannot be an unnecessary element if the system as a whole is unnecessary. And without having destroyed the system, it is impossible to eliminate an individual element.

This then is what happened following NEP: the system of distribution revived and did not die off.

True, the revival of this system took place under Fortunatus's cap: the very term "distribution" disappeared firmly from the economic and political dictionary and thus the process was not noticed and cannot be commented upon.

NEP was and remains the only true attempt at achieving distribution, a unique and serious attempt at reviving a single equivalent market.

Why was NEP overturned and trampled upon so easily? Why was it turned back so abruptly? Who initiated the restoration of distribution? Was it Stalin? Such an answer would be too simple. Stalin was a practical worker from a pragmatic standpoint and he was neither a strategist nor a theoretician. He did not have an independent or internally durable program, but rather he composed his program from the programs of other bright political figures. Moreover, it was from these figures that he seized the authority that had been neglected by them and he seized it in a truly steel-like death grip. He was not aware, for example, of the dramatic manner in which Bukharin endured so agonizingly the period of demagoguery. With an external adherence to Leninism (which did not extend in his development further than the summer of 1921), a Trotskyite sat firmly and secretly inside Stalin (with all of the personal aversions to Trotskiy). The most substantial divergence from Lenin concerned the manner in which they viewed the social base for the political authority of the soviets: Lenin—in a democratic society which did not exclude the peasants (at the time, the overwhelming majority of the population); Stalin—in his authoritarianism, operated on the basis of a frequently changing bureaucratic hierarchy and a higher organization of coercion and suppression. Stalin was himself a part of the organization that was created. And the clannish material interest of the privileged bureaucracy was based upon the alienation and redistribution of economic values within the framework of a "common pot." Here was somebody who was vitally interested in distribution. Stalin was simultaneously the savior and demiurge (creator) of distribution and a true leading figure in the associated bureaucracy.

Inflation Hand In Hand With Deflation

The total state monopoly on distribution created an all-encompassing "common pot" in which the expenditures and results of individual workers and collectives were depersonalized. The bureaucracy stood vigilantly by the "pot." This led to unrestricted debauchery and to a true element of voluntarism and these were justified theoretically by certain alien "objective economic laws," which function "regardless of the consciousness" of such a fate.

Having become a general purpose form in all elements, oblasts and spheres of internal economic circulation, distribution has once again revealed its ineffectiveness, since it is unable to prevent inflation even in its own protected territories. It encouraged inflation not only from without but also within its own borders.

Let us examine some individual "compartments" of internal market-distribution.

Market for agricultural raw materials. Commencing in 1953, increases took place in the procurement and purchase prices and this had an immediate effect at kolkhozes: income rose and with it labor activity. But 2 years later, a decline set in and the earnings of a work-day fell, although income continued to rise. What was the problem? I could never understand this and while on temporary duty assignments I tirelessly asked: why? The answer was not forthcoming from offices visited, but rather it came unexpectedly from a kolkhoz-proprietress when I paid for my billet. She accepted the money and opened up an unlocked drawer of a commode: how much money was lying there and for what reason? There was nothing that could be purchased with it, not even a quilted jacket or rubber boots in our stores. What was the paper money good for?

Devoid of prejudices, N.S. Khrushchev found a rapid solution for this situation—the sale of amortized, worn out and, beyond any doubt, already purchased equipment of machine tractor stations. This restored the monetary balance for a period of time, but it did not bring about a rebirth of the equivalent market. Who knows what these measures could have produced if they had been carried out in a consistent and purposeful manner? We can now only venture a guess in this regard. They were not completed owing to the fact that not enough time was made available. Since 1965, the monetary pumping up of the rural areas has been inflationary in nature and today one drawer of an old commode is not enough. I saw an announcement at a Moscow sovkhoz: an invitation was extended for the harvest, with 10 rubles being paid immediately for one ticket. There were no takers.

Market for means of production. Here deflation is especially formal in nature, since the distribution of low and stable wholesale prices only served as an unnecessary and redundant increase to a natural distribution—for funded and limited logistical supply and also for a distribution of financial payments. Here the properties of distribution are manifested more clearly. The economic reform of 1965 has retained fully and has once again legalized the existing forms of distribution (distribution of payments, distribution of logistical supply and others), but at the same time it threw open the door to inflation. It burst into the wholesale market, although it flowed irregularly (particularly with respect to machine building).

Market for investments. Since the first five-year plan, an artificial inflation of investment demand has created a prolonged, stable and chronic situation of reaccumulation and this has served as an inflationary factor. In the face of deflationary prices, capital investments were mastered with difficulty and always incompletely. Since 1965, a rapidly expanding distribution of bank credits has been added to the distribution of budgetary financing. A fanatic expansion of credit has once again taken place in the form of a bureaucratic distribution and has attached a mainly credit nature to inflation as a whole.

Market for labor. A limitation on growth in wages (consumer demand) was held under administrative restraint: the distribution of output norms based upon a wage system was augmented—regardless of the wage system—also by a distribution of the wage fund (in a manner such that the output norms were often stimulated). The planning of wages had the following defect: it was in no way dependent upon a commodity inflation of the consumer market, but was carried out in an approximate manner for growth in labor productivity (but even the "law governing leading growth in labor productivity" was not fulfilled). Since productivity increased the most in the production of means of production, the wages deviated most from their commodity saturation, created in the production of consumer items (goods and services). An inflationary surplus of an unsatisfactory monetary demand increased at rapid rates.

Consumer market. Here inflation can be considered as traditional. Only twice—on the eve of the Great Patriotic War and following the monetary reform of 16 December 1947—it was interrupted by brief, that is, spasmodic deflations. Moreover, this was achieved by forcible measures involving administrative pressure and on each occasion—following strong inflation and by contrast this created a sense of definite consumer comfort. This remains in the memory of living generations and it still arouses nostalgic feelings. I should think so! The stores are "crammed" with excess goods, despite the fact that the supply in terms of physical volume continues to remain low. A common opinion: "We only began to live prior to the war." From October 1940 until June 1941, roughly one third of the available money was removed from circulation. Deflation was so outrageous that plans were prepared on an urgent basis—from the second half of 1941, to raise income to the level of commodity supply or to lower the stinging prices.

Deflation following the war was of the same nature: a portion of the newly printed money was "held back" in the form of emission reserves. Regular reductions in the extremely high prices compensated fully for the annual voluntary applications for state loans. However, deflation did not destroy the black market even for a brief period of time. To the traditional assortment there alone was added an illegal trade in state loan obligations, which were extended at much lower figures than their nominal values in order to compensate for the general shortage in payment funds. The available money in circulation can be viewed as having been relatively stable between the mid-1950's and the mid-1960's. The reform of 1965 initiated monetary payments which were not supported by commodity resources. Inflation began to increase at an accelerated pace. Mainly costly goods began to disappear one after another from the store shelves. Inflation is presently thriving upon the nostalgic complaints of the past.

Prior to the mid-1980's, the inflation rates were almost on a par with the overall rates of economic growth and reached double-digit figures for some goods on the consumer market. Since the monetary payments increased throughout this period ahead of their commodity support, a huge unsatisfied demand for money developed. At the present time, the current income of the population, together with savings which accumulated in past years, are exceeding annual purchases (retail commodity turnover and paid services) to a considerable degree. This signifies that the population will on the average be ensured, by virtue of its income and past savings, for several years into the future and thus it will be able to maintain its standard of living, provided it does not work or, having abandoned its work positions, invests fully in that work. This will be true if it does not

repel the desire to work, which in any case will greatly weaken the motivation to work and raise its skills and efficiency.

Allow me to cite a story involving one 1st class chauffeur. While in his native southern city, he wished to become attached to a taxi pool. However, they demanded such a bribe that he could not restrain his southern temperament and he blurted out his convincing argument: "If I had such money, why would I wish to work?" This was a completely natural, normal and fair reaction. This was not the last reason for inflation assuming the features of stagflation (inflation as a factor of stagnation and depression), with economic growth relapsing into a state of exhaustion.

Non-money Market. This is a part of the consumer market, which appears as a natural distribution of "free" (non-money) socio-cultural services, artificially and arbitrarily removed from the normal money market. As you can see, such an unsound limitation on the sphere of monetary circulation could lead only to inflation. Moreover, a commodity shortage in the non-money market is considerably greater than in a money market.

Similar components of the black market conform to each of the mentioned positions. In the case of the black market, everything is sold—from limited means of production in excess of the funded logistical supply to formally non-money but acutely scarce services. Here freedom of consumer selection that is not limited by distribution, free convertibility of currency, price balance for supply and demand and equivalent prices for "free" services have existed since olden times. All of this serves as a necessary counterweight for distribution, as compensation for deflation benefits, as a reaction to the natural market and as a protest against bureaucratic tyranny.

Price for Free Operations

One does not encounter gratuitous blessings in economics. They all result from labor expended. Hence how can we have free services and who provides them? The state? But in order to provide such services, it must take in more than it issues. Our mythological consciousness creates a fairytale type of source for prosperity, a donor of gifts and a guarantor for a fair distribution. In reality, everything is just the opposite: production and our own labor serve as the state's source and provider. If the services are free and the work performed by those who render them are by no means free, then the work performed by those who receive the services is partially free. Imagined free operations are fully paid for by free labor. We are constantly being deluded and deceived by blind faith. Free operations cannot be viewed as manna from the heavens but rather as ordinary bureaucratic distribution in which a portion of the monetary value distributed usually is returned to the bureaucrats who stand vigilant guard over the "common pot."

A principle of socialism affirms that there is one criterion for distribution—work as the sovereign master. In the case of free distribution, work is transformed into the status of a slave. It is not only bad that the services are distributed on the basis of an apportionment, although it must be confessed: we need more honest services than free services, if you will excuse the pun. Considerably worse is the fact that free operations assumes a general distribution of the products of labor. And the state forms its budget not using the truly fair method of firm monetary taxes, but rather the method of monetary distribution, an all-encompassing and total system of labor and natural obligations.

A Single Market

We can rid ourselves entirely of inflation only with the help of a monetary reform. Only then will we be able to firmly fix the monetary scale and establish a reliable barrier against a further monetary exchange. Yes, and not only this. The time is at hand for overcoming many of the atavisms of the monetary system that have accumulated. Could this include at the present time the division of bonds into bank and treasury notes? Do we believe that they are secured by gold? Yes and does a need exist for freely exchanging them for gold? Many problems must be solved by the future monetary reform and in the absence of such a reform no useful results can be expected from a price reform or from a budget-financial and credit reform. Indeed these are all related parts of a single complex of radical measures for normalizing the monetary, price, financial and credit economy. A requirement exists for ensuring a free convertibility for our currency and for facilitating its unhindered entrance into the international arena. But all of this is for the future.

And what about today? The creeping inflation of income has produced a galloping inflation in prices and the latter in turn requires a galloping increase in income. Thus we have a vicious circle. We have here an inflationary spiral. It resembles a merry-go-round at a fair on which everyone circles madly about, while vainly attempting to catch one another—increasing income and then increasing income followed by overtaking prices. Up ahead, a new turn in this spiral is inevitable. And what happens if suddenly the merry-go-round comes to a jerking halt? Everything will fly from their assigned places and injuries will ensue. Nor will anyone be able to maintain their balance.

An efficient reordering of goals and priorities is needed. Until the monetary scale is placed in operation, influence can and must be brought to bear upon the program. As the first step, the existing stagflation should be directed into the channel of the inflationary boom, which will promote increased economic and especially innovative activity and aid in overcoming the prolonged stagnation. A need exists for ensuring an increasing trading value for the ruble. The accumulated reserves of monetary savings must be fully drawn into economic circulation. There is nothing wrong with enterprises being allowed to freely sell unnecessary or surplus equipment and materials or to use earned income for forming

its own investment funds for technical modernization and re-equipping. The same goals can be served by an expansion in the free sale by enterprises of their own shares of stocks and bonds. The greater the interest rate for them, the higher will be the lower limit of effectiveness for the enterprises in the corresponding production investments (if the effectiveness turns out to be lower than the interest, the enterprise will go bankrupt). Thus the growth in interest will be profitable not only to the holders of these valuable papers but also to the enterprises and also to those who need their products. And the higher the lower "plank" for effectiveness is raised, the greater will be the profit for society. Only in this manner will it be possible to achieve an adequate commodity supply. It is still inadequate and the trend towards growth in prices has still not been overcome. It would be absurd to restrain the growth in monetary income. To the contrary, it must compensate for the increase in prices.

The rank and file consumers are alarmed not so much by inflation itself (moreover, not even the scientists can agree among themselves exactly what is happening) but rather by its irregular nature. These are different things.

We have grown out of the habit of depending upon a normal market and the freedom of consumer selection. Over a long period of time, life has trained us to expect a curtailed assortment of goods at the same prices. We weaned ourselves away from making selections. And there are those who, without instructions or out of habit, enter into a state of shock when given the opportunity of making a free selection. This is particularly true when we encounter a situation in which the same goods are literally traded at different prices. It is possible to acquire different quantities of the same product for the same amount at different markets. The unity of the monetary system cannot endure the split of a single market into several independent markets having their own special prices and monetary scales. This creates instability in the monetary unit, it undermines faith in the general nature of the monetary equivalent and it cannot exist in the absence of confidence in the money.

But indeed a multiplicity of markets has existed since olden times. It would seem that we should be accustomed to them. I have in mind not a natural division of them (for example, a market for cauliflower, a woolen fabric market, a market for raw materials and an investment market—these are also "different" markets), but rather an artificial separation of markets based upon whether they are deflationary or inflationary or private or available for general use. But indeed, such a breakdown became available not just yesterday or today.

At the present time, still another market is being added to this multiplicity of markets—the market for the cooperative and private sectors. It is balanced and yet it is still inflationary. Is it a new phenomenon? Let us rummage through our memory. I cannot remember a time, even 20 years ago, when it was possible to obtain a state taxi in a southern airport. The taxi drivers flatly refused. But yet 5 years ago in Moscow, on Kuybyshev Street, on the same corner where Minfin [Ministry of Finances] is located and where the vehicles slow down, I tried in vain to catch one taxi after another showing a green light (I could only assume they were on special assignments). A man who was not wearing a red band approached: is a vehicle needed? Immediately a private operator drove up, the door opened and the carpet was straightened out. I paid almost the equivalent of the state price.

Still another incident. Fifteen years ago, in Kislovodsk, a picturesque old man with a grey beard was doing a brisk trade selling plaster eagles. There was a line of buyers and the eagles were selling like hotcakes. "If Minfin could only see this! Why does it not endorse the private tradesmen?" my colleague asked indignantly. "Minfin" I replied, "should issue him an honor certificate and a monetary award." "How so?" "The old man is doing what he has to do and yes he has learned to do things differently: Minfin standardizes monetary circulation at a resort and is restraining a furious onslaught by monetary demand, which here comes from all areas. Let us ask the people standing in line if they agree that the old timer should be turned over to the militia." However, I did not see the old man again: could he nevertheless have been seized?

The legalization of such a market is a necessary, timely and truly democratic undertaking: it guarantees freedom for consumer selection and freedom for competition between a salesman and purchaser and not simply competition between salesmen. There is a future for such a market and not just for those who are privileged to have been selected—those who have been issued special passes, while "entrance is forbidden to all others." Those who possess special passes view things differently. They are accustomed to privileges and benefits, to money in envelopes, to a shortage of special distributors, to black "Volga's" and to gosdacha's [state country cottages]. They are not accustomed to paying on a par with all others for taxis and delicacies. Inflation incites among them fear, desperation, resentment and indignation. Truly theatrical passions rage within these by no means artistic natures!

But the whims of social consciousness and mass psychology are strange and truly inscrutable. We relate ourselves calmly to these rogues and we are not embarrassed by their unique ability to "acquire" sausages which are in short supply or by builders who can obtain urgent repairs. Nor are we surprised by the fact that they are able to purchase items at the former low prices. We accept without protest all of these absurdities of a bureaucratic market and almost as though we recognize that they are proper. In return, they provoke us for being "individuals" and cooperators who make sausages or who carry out urgent repairs, since we transfer our own hard-earned money into their pockets. And is this not really the same money that feeds and makes rich the monsters of the privileged market? The overpayments that some make are used to cover the underpayments of others. All of the separate markets are connected by a common "yoke."

It is possible for the normative supply to be covered completely by means of deficit products and for the marketable resources made available to be included in the normal trade turnover or distributed on the basis of coupons among pensioners, invalids and veterans. With regard to an increase in the state prices, society is completely unprepared psychologically for such a step. Why is this necessary? In order to provide artificial support for deflation? But the granting of privileges was long ago converted into an anachronism. Was it for the purpose of compensating the budget for subsidies (for the difference between the purchase and retail prices)? For this purpose, it would be sufficient to redistribute the commodity resources among the state and commission trades. An arithmetical approach for prices is dangerous. One must weigh the advantages and losses from the increase in order to see that the damage is immeasurably greater. They in no way reflect upon production or, it follows, upon marketable supply (this is dependent upon the purchase prices and they are higher than the retail prices) and a mass consumer suffers a double loss: at a higher price, the amount of a shortage in a sale does not increase. Who wins? The speculators and bureaucrats who purchase the deficit at state prices (even when the increase is lower than the commission price). The winner is a hardened stereotyped price, the chief function of which is not normative, as one might expect based upon the logic of things, but rather accounting, that is, the expenditures are passively reflected in the price. A moss-covered dogma which serves as the fundamental principle for an expenditure orientation for the economy is the victor.

And a chief consideration is the fact that inflation cannot be eliminated so long as its double—deflation—remains, and this includes the entire distribution system on the whole.

Money is only an organ of the market and an adequate instrument for it. If the market is healthy, there should be no concern regarding money. And it is impossible to protect oneself against inflation in the absence of a market.

Appeals to "halt" inflation, with the market remaining in its present status, constitute utopia. What would the cost be? Would it be a noble burst from an impassioned feeling? Or would it be a latent desire to instigate incorrect and deliberately doomed decisions capable only of discrediting and defaming the truly noble goals of perestroyka? Frightened by hyper-inflation, hardened reflection hysterically protests against the market with its immutable norms, which have zealously scorned a planned bureaucracy for an extended period of time. And what is the appeal? The goals must always be proportionate to the means. We must be realists. Today we are being burdened not so much by high prices relative to income, but rather by insurmountable difficulties in the bartering of money. Under these conditions, an artificial slowing down in the growth in income and prices tends to hinder an acceleration in socio-economic development and complete commodity saturation of the market and a solution for the strategic task of restoring the purchasing power of money. Is this not a paradox?

Let us examine the dialectics of goals and means.

What is the strategic task? To gradually revive the unity of an equivalent market, to create a unified market in conformity with its internal immutable norms and, towards this end, to gradually eliminate the artificial "barriers" between markets, to make the competition between them more free, with regional markets included in this competition, and to ensure a free movement of goods while bearing in mind that a free and unrestricted flow of goods is the only factor which is capable of beating down the high and speculative prices. And on this basis, to combine all of the markets into one, in a competition for equivalent markets that will ensure a balance in demand and supply. Quite possibly, the single market will be of a combined nature—state-cooperative.

It appears to me that the first step in solving this strategic task should be that of abolishing decisively the depraved and harmful market of distribution in all of its forms, including its latest setbacks. Finally, a need exists for understanding that a market cannot be controlled effectively or reliably using distribution methods, but rather a need exists for more delicate and considerably more efficient methods and means.

This task will not be solved easily. First of all, it appears to me that it will be necessary to revive those higher echelons of planning which suffered greatly during the years of stagnation and this can be done by using workers who have not developed prejudices or become accustomed to the distribution stereotype.

Inflation cannot be eliminated without first eliminating its primary cause.

However, bearing in mind the future as we see it, it is possible for inflation to be a counter-force in itself. To be more exact, controlled inflation can become a means for gradually and finally normalizing monetary circulation, that is, for overcoming inflationary phenomena in the final analysis.

Actually, at the present time an inflationary monetary demand can be opposed by a commodity mass of stocks and bonds of enterprises. Subsequently, however, such valuable papers will intrude into monetary circulation together with the "usual" money and the monetary mass in circulation will increase. Is this to be feared? Yes, this will only strengthen monetary circulation and draw into it those reserves of monetary savings which are lying inactive at the present time in the manner of a dead weight and heavy burden and exerting pressure on the economy and on monetary stimuli. Is the fact that this "burden" is hidden in savings banks easier for us, similar to the statistic on "hidden prices?" The development of a normal market solution for old reserves is tantamount to strengthening trust in money. Yes, indeed a true standard of living for the people is determined not only and not so much by the "physical volume" of consumption but by the speed of circulation and by the rapidity of

turnover in current and accumulated income. Let this income flow more rapidly into circulation and into the circulating mass.

We must not forget that the deepest roots of inflation are concealed in a deficit state budget. If a budgetary distribution is not reduced to 20-30 percent of the national income (at the present time, the budget is truly not redistributing more, despite the fact that approximately 70 percent of the national income is being moved), the roots will remain regardless of the degree to which the leaves and even branches are disturbed.

The most outrageous type of distribution is that of budgetary subsidies. They are presently being issued to the producers of unprofitable products—goods and services (for example, to agriculture or theatres). Such a system does not motivate and does not stimulate reductions in the cost of products and it does not hinder systematic growth in subsidies. It is clear that subsidies can be employed in a rational and intelligent manner only if they are directed to consumers rather than producers and necessarily in a monetary form (that is, with complete freedom for consumer preferences). Only if such action is taken will it be possible to halt the growth in subsidies (one of the reasons for a budgetary deficit) and to stabilize them.

An increase in the monetary payments to the population will only strengthen and raise their social prestige. An exchange in the monetary scale will favor it. Should a restriction be placed upon the amount of money formed if this leads only to inflation? I propose that the same operation be carried out with the budgetary financing of "free" socio-cultural services. Here I have in mind the need for ensuring that the entire amount of budgetary subsidies and financing of the socio-cultural sphere be strictly and equally divided up among the monetary incomes for the population (wages, pensions, grants and others) and be included in the normal market turnover, with the socio-cultural sphere being converted over to complete cost accounting, as called for in the Law Governing a State Enterprise. What will the proposed action accomplish?

Once again, the available amount of money will increase, with the real marketable inflation of each ruble and its practical purchasing power increasing to the same degree. Indeed the socio-cultural sphere exists even now, only at the present time it is bureaucratic in nature: producer-bureaucrat, doctor-bureaucrat, teacher-bureaucrat. With the conversion of this sphere over to cost accounting, there will finally be an end to bribes, modest "gifts" and presents, which are now being accompanied by free services, and the entire sphere will finally come under extensive control by consumers over these services which are of such importance to everyone.

"And what about the social guarantees?" I hear an indignant question being asked. Indeed, this is not the first time that the "advantages" of socialism in fact turned out to be its deformations and distortions. Genuine social guarantees must truly ensure first of all a bartering ability and real purchasing power for money. In the absence of this or apart from this, they are at least self-deceptive. Certainly, provision must be made for privileges and benefits for those who need them and yet once again they must necessarily be issued in monetary form and in a democratic (for example, through the trade unions) rather than bureaucratic form. And if the social guarantees are carried out by means of the ruble, only then will the ruble truly strengthen and prevail over inflation.

The regulation of monetary circulation must maneuver skilfully between inflation and deflation. Both of these unpleasant ailments lie in waiting for it on both sides and overtake it not only by turns but also simultaneously. One must abide by the "rule of the yoke," avoid changes in direction to one side or another and if such changes do occur, to steer carefully and accurately.

During such unpleasant situations, social consciousness and mass psychology must be adjusted to reality and no attempt should be made to conceal these realities behind old prejudices. It must not be forgotten that economics is a sphere of social psychology and that consciousness always lags behind.

It will not be possible to turn back the accumulated force of inflation in the space of just one hour. And one can only tolerate and endure the inflationary spirals for a period of time as an inescapable evil similar to the inevitable floods and droughts or unstable weather: no sooner do we become accustomed to one, than it changes sharply. At times, one needs an umbrella for protection against rain and then later against sun. Similarly, we must endure cold and suffer heat. The hardships must be endured. What can be done? The umbrellas must be changed in a timely manner.

REGIONAL DEVELOPMENT

Economic Cost of Ethnic Clashes in Azerbaijan Cited

18200142 Baku BAKINSKIY RABOCHIY in Russian 1 Dec 88 pp 1, 4

[Article by Azerinform correspondent: "How Much Does Idle Time Cost?"

[Text] For the second week now our republic and its capital have experienced difficult and anxious days. The situation in Nagorno-Karabakh Autonomous Oblast and the attitude toward individuals of Azerbaijani nationality at places of compact residence in Armenia evoke just indignation on the part of all the people and representatives of all the nationalities living in the republic.

All these and other facts are justly considered by our republic's citizens encroachements on the people's rights, honor, and dignity and provocative actions, whose direct and main goals are a challenge and an attempt to destabilize the situation in Azerbaijan and to do damage to good neighborly relations between nations living next to each other for two centuries. This has served as an impetus for mass demonstrations, meetings, and strikes, by means of which the republic's public hopes to attract the country's attention, to resolve the entire set of accumulated contradictions in the shortest time, and to attain the most rapid adoption of the demands put forward.

Of course, all these forms of expression of the people's will have the right to existence, especially now, during the period of democratization and rise in political self-consciousness, when people, perhaps for the first time in many years owing to restructuring, feel to be truly involved in public and state affairs. At the same time, these, seemingly democratic, forms of expression do serious damage to the national economy of Baku, Azerbaijan, the country, and, consequently, each of us. After all, they not only complicate the operation of city transportation, disrupt the normal labor rhythm of enterprises, institutions, and educational establishments, and sow disorder on streets, but also create a difficult psychological atmosphere and uncertainty and anxiety for tomorrow.

In what are these actions expressed? What form do these actions take from the economic and material point of view?

The republic's Goskomstat named specific figures for the Azerinform correspondent: Last week, owing to the idle time of plants, factories, and enterprises of extractive sectors, products worth more than 60 million rubles were underproduced. This means that the country will fail to obtain 8,500 conditioners, 1,700 refrigerators, 1.8 million meters of cotton fabrics, and 280,000 meters of wool fabrics. Sewn articles worth 700,000 rubles and knitwear worth 520,000 rubles were not produced. Losses in the production of oil field equipment totaled 8.5 million rubles!

How many complications and difficulties Baku residents had to experience owing to failures in the operation of public transportation! Thousands of people could not begin their work and get home on time. It turned out that strikers, who exercised, as they believed, their constitutional right, with their actions violated the civil rights of other people to labor. The republic's transportation organizations also incurred vast losses—more than 1 million rubles.

More than 800 railroad cars, in which food products, building materials, and necessities wait to be unloaded, have accumulated at the railroad stations Kishli-gruzovaya [freight] and Khyrdalan.

For those for whom these 60 million sound like an abstract figure we will cite the following example: With this sum it would be possible to build 90 standard polyclinics for 380 visits per day, or 30 schools for 1,200 students, or 90 nurseries. Is this impressive?

To be sure, it is worth pondering over what the idle time cost us. The entire burden of losses falls primarily on the shoulders of the workers themselves. During these days of meeting "democracy" we have been deprived of almost 300 apartments, which could have been built if not for the idle time. How many long-awaited housewarmings have been postponed for an indefinite period?

According to the most tentative estimates, industrial workers alone lost about 10 million rubles in wages. But most enterprises have changed over to cost accounting, whose basic demand is self-financing. In other words, these losses will not be compensated for by the all-Union budget.

It seems that Armenian extremists, destabilizing the situation in Baku, have sought precisely this.

Thus, to whom do we do worse?

Maslennikov Discusses RSFSR Regional Self-Financing

18200136 Moscow SELSKAYA ZHIZN in Russian 23 Dec 88 pp 2-3

[Interview with Nikolay Ivanovich Maslennikov, chairman of RSFSR Gosplan and deputy chairman of the RSFSR Council of Ministers, by V. Virkunen, date and place not given; first two paragraphs are SELSKAYA ZHIZN introduction]

[Text] The thorough democratization of our society is affecting all aspects of the country's political, economic, and social life. All strata of society are becoming more civically active, and ethnic self-awareness is also increasing. People want the destiny of their cities, rayons, oblasts, and republics to be decided publicly and openly. They have also been proposing alternatives for the economic development of regions, they have been defending them, and they have been combating the departmental approach. It was emphasized in the extraordinary session of the USSR Supreme Soviet that it is especially important to find the optimum relationship between jurisdiction of the Union and the union republics in the economic field. This is no simple task and is multilevel in nature.

The editors of SELSKAYA ZHIZN called upon N.I. Maslennikov, deputy chairman of the RSFSR Council of Ministers and chairman of RSFSR Gosplan, to tell about the basic conceptions for development of regional self-financing and the role of RSFSR in the unified national economic complex of the USSR.

[Virkunen] Nikolay Ivanovich, recently the press, radio, and television have been devoting a great deal of attention to regional cost accounting (khozraschet), including republic cost accounting. What is your appraisal of this problem from the standpoint of RSFSR Gosplan?

[Maslennikov] The issue of optimum combination of the sectoral and regional principles in planning has long been pressing. But let us see at what level cost accounting is possible. Only at the level of the commodity producer, that is obvious. In our system, that is mainly the socialist enterprise (association). That is why, in our opinion, we should talk about republic or regional self-financing.

The conception of regional self-financing must envisage linkage of the economic and social development of a particular region, whether it be a union republic or oblast, with the interests of the entire state.

The basic principle which must be implemented is establishing direct dependence of the resources committed to economic and social development on the end results of the activity of enterprises and organizations located in that region.

By order of the RSFSR Government, central economic authorities in the republic have begun the preparatory effort to work up the principles for the transition of RSFSR to regional self-financing. To that end, proposals coming in from the field are being carefully examined and discussed.

We are aware that before these principles are worked out and applied all enterprises and organizations have to make the transition, including even the nonproduction sphere, to the new economic conditions, new methods of forming budgets in all the units of the budget system have to be developed, a procedure has to be defined for the participation of enterprises in development of the production infrastructure and social infrastructure of the regions, and the legal aspects of this problem have to be worked out.

The RSFSR Council of Ministers reported on approaches to solving these problems in a conference held in the premises of the USSR Council of Ministers on 18 November of this year. From our point of view, it would be advisable to do this job in stages.

Accordingly, in its ninth session this November the RSFSR Supreme Soviet ordered an appropriate economic experiment to be organized in Tatar ASSR, Sverdlovsk Oblast, and the city of Moscow.

[Virkunen] At present, it seems to be extremely complicated to ascertain with a high degree of reliability how much of what a particular republic supplies to the union fund and union budget and how much it receives from it. After all, in present pricing practice, which is not perfect, to put it mildly, it is no simple matter to conduct such an analysis. This situation in turn gives rise to differing viewpoints on the subject of redistribution of national income at the union level. What is more, certain regions and republics feel "cheated."

[Maslennikov] That is not exactly the way it is. The economic authorities of each union republic can provide a fully exhaustive response as to their interaction with the union budget. At the same time, present pricing practice does to a certain extent distort both the results of the analysis and also the conclusions concerning the equivalence of exchange among the fraternal republics.

With respect to the national income produced, the gross social product, and industrial output, RSFSR occupies the leading place among the union republics, and in the all-union division of labor the RSFSR economy figures as the producer and supplier of products of the extractive and manufacturing sectors. The products of heavy industry represent nine- tenths of RSFSR deliveries in interrepublic exchange.

The specific nature of the RSFSR economy is manifested at the ratio of total capital and fixed capital to the social product and in the structure of the national income used.

For instance, whereas in terms of per capita national income produced RSFSR occupies fourth place among the union republics, with respect to the share of the consumption fund in the national income used it is only in 11th place.

A similar situation has come about with respect to real personal income and social consumption funds. The Baltic republics occupy the first three places with respect to these indicators.

It is no accident that in a number of the country's union republics the national income produced in 1987 was less than the national income used.

I have given the figures and examples above not in order to support conclusions and evaluations. They indicate that economic authorities have everything they need for an analysis, but unfortunately it is made on an ad hoc basis and is not used to improve interrepublic economic relations.

[Virkunen] Because at present there are no satisfactory criteria for evaluating each republic's contribution to the union fund, what measures might in your view speed up development of a more constructive approach to determining the effectiveness of the economy of each of the republics? How do you see this problem being solved in RSFSR?

[Maslennikov] It is not altogether correct to say that there are no such criteria. The whole point is that they are in need of radical improvement, especially when it comes to regional self-financing. This question might even be broadened. The problem is not only speeding up

development of a more constructive approach to evaluating the performance of each of the union republics; it must also involve appraisal of the contribution of each autonomous republic, each kray, and each oblast. Many of them have a sizable population and economic potential.

That is why scientifically sound and stable standards will soon be developed for all the union republics, and a price reform will be carried out in order to determine with the greatest accuracy all the socially necessary expenditures to produce the unit of the end product. A financial mechanism has to be worked out for implementing regional self-financing and its principles.

[Virkunen] When we discuss self-financing, it seems to me, we cannot avoid the principles governing formation of the republic budget. It is based on revenues from enterprises and organizations in the form of payments from profit, the turnover tax, and other revenues. It is well-known that the profit of state enterprises is by no means distributed to the advantage of the republic budget, but to the advantage of ministries. For example, the Omsk Tire Plant credits about half of its entire profit to its ministry. There are such examples on all sides. Nevertheless, in the last session of the RSFSR Supreme Soviet the republic budget was approved with a deficit of 6.35 billion rubles. How will the local and republic budgets be formed when regional self-financing is adopted?

[Maslennikov] The transition to economic methods of managing the region imparts urgency to the problem of expanding the financial independence and initiative of local soviets of people's deputies. The financial resources committed to the economic and social development of the republic and its regions, in our opinion, must be formed on the basis of revenues representing a portion of the profit of enterprises and organizations performing their activity in the given region as well as payments for labor resources and—in the future, for natural resources as well. The republic budget must be financed with revenues representing a fixed proportion of the turnover tax and other forms of revenues collected locally.

In dealing with the problems of regional cost accounting, ispolkoms of local soviets should be given the right to create money funds for economic and social development outside the budget. Such a fund should, for example, receive revenues from the income of cooperatives and joint enterprises of state-cooperative organizations.

A sizable source for the formation of this fund would be proceeds from the subscription of local loans again organized on the initiative of soviets, from money-merchandise and other lotteries, and optional taxes on individuals to carry out special local programs, and resources from local Saturdays. We need to speed up the preparation of procedural principles on exaction of compensation for damage inflicted on the environment and other violations which should also go into the local budget.

[Virkunen] By all appearances, these matters will be reflected in the draft of the new Law on Local Self-Government and the Local Economy?

[Maslennikov] To some degree—yes. But we will not get out ahead of events. This approach to forming and using financial resources accumulated in local and republic budgets will, in our opinion, make it possible to guarantee balance between the revenue and expenditure sides of the budget and to strengthen the financial base of local soviets.

The effort now being made by ministries and departments, local administrative authorities, and enterprise and associations to achieve the financial soundness of the sectors of the economy will help to mobilize internal potential, to reinforce the revenue side of the republic budget, and to overcome the deficit.

[Virkunen] What problems of an economic, social, and ecological nature are arising in relations between republic authorities and union departments, and how might they be resolved?

[Maslennikov] As a matter of fact, the share of economic entities under union jurisdiction is high in RSFSR. For instance, the union portion is about 60 percent based on the contribution to the national income produced.

Almost half of all the republic's workers and employees are working at enterprises under union ministries. But the share of enterprises under union ministries in construction of projects in the social sphere is not equivalent to the number of workers at those enterprises.

For instance, in the years of the 11th FYP their share was about 53 percent in building preschool institutions in RSFSR, 20 percent in school construction, 35 percent in hospital construction, 47 percent in polyclinic construction, and less than 50 percent in housing construction.

The attitude of union ministries toward ecological issues is also very disturbing to RSFSR Gosplan. The reference here is above all to USSR Minenergo, USSR Minchermet, and USSR Mintsvetmet. The emission and discharge of harmful substances is substantial at enterprises of USSR Minudobreniy, USSR Minkhimprom, and USSR Minmedbioprom.

Why is this happening? It seems to me that the reason is that in these ministries the residual principle has still been preserved for distribution of capital investments, they want to solve production problems without a comprehensive approach to natural resource conservation and to a certain extent at the cost of a deterioration of the natural environment.

These and a number of other ministries have not been performing as they should the assignments of decrees of the party and government on prevention of air pollution in Kemerovo, Krasnoyarsk, Chelyabinsk, Magnitogorsk, Nizhnyy Tagil, Omsk, Volgograd, and other cities. In

spite of the unsatisfactory ecological situation, union ministries obtain approval for expansion of existing enterprises and construction of new ones in cities which USSR Goskomgidromet has placed on the list of those with the highest level of air pollution.

The republic has an obligation to deal with these issues independently, with the active participation of union authorities.

[Virkunen] Within RSFSR, there is practically everything necessary for the normal functioning of a national economy—extremely abundant natural and labor resources, an immense production potential and scientific potential, and an elaborate network of enterprises in the agroindustrial complex. I am far from thinking of revising the postulate of the indestructibility of the friendship of peoples of the USSR. But how do you think RSFSR might get along without the union republics, without the country's unified national economic complex? What does RSFSR get and give in the process of maintaining economic relations with the other fraternal republics?

[Maslennikov] I have already said that RSFSR figures above all as a supplier of diverse production goods in the interrepublic division of labor: raw materials, supplies, fuel, as well as machines and equipment. The republic has a well-known role in meeting the needs of the other regions of the country for fuel and energy. It should be noted that exports of products of the RSFSR fuel and energy complex provide a sizable portion of the USSR's inflow of foreign exchange used to import high-quality products from the world market into all the union republics without exception.

The structure of interrepublic exchange that has formed over decades on the whole is in line with the interests of the entire state in the most efficient use of natural-and-climatic, demographic, production, and scientific potential of the USSR. Of course, this does not mean that the structure of imports and exports is entirely perfect and will not change in the future. But still that change must not bring about a drop in the intensiveness and effectiveness of economic relations among the fraternal republics.

Any artificial rupture of economic relations within the framework of the unified national economic complex would have a disastrous impact on production efficiency and the standard of living of the people in RSFSR and the country as a whole. The consequences of entirely eliminating RSFSR's relations with the other union republics were once calculated by scientists of the Siberian Department of the USSR Academy of Sciences on the basis of an intersector model.

The results showed that the volume of production of the gross social product would drop 10-15 percent in RSFSR and 40-45 percent in the other fraternal republics of the USSR.

Those, then, are the losses that could result from disruption of the national economic relations among the republics.

The advantages of fraternal interrepublic relations are manifested with particular vividness under extreme conditions. We all remember Chernobyl. Now the entire country is helping Armenia to heal its wounds inflicted by the disastrous earthquake.

We have a unified power system, unified systems for gas supply, fuel supply, all branches of transportation, state reserves, and the circulation of money. That is, our country is a unified national economic complex. That is our strength.

[Virkunen] What could you say about RSFSR's imports and exports of consumer goods and foodstuffs in particular?

[Maslennikov] Interrepublic deliveries of agricultural products take place in the country according to the present specialization of production and capabilities of the union republics for food production.

The needs of our republic for meat and dairy products are met (except for Moscow and Leningrad) by our production. According to the plan for 1989, RSFSR is to deliver to union stocks 940,000 tons of meat products, 6.6 million tons of dairy products, and 4.65 million eggs.

In carrying on mutual exchange of products and raw materials with the other union republics, RSFSR imports from Ukrainian, Azerbaijan, and Uzbek SSR about 800,000 tons of early vegetables as well as grapes, fruit and berries, and other foodstuffs.

RSFSR exports to the Kazakh, Belorussian, Kirghiz, and Uzbek union republics 11,700 tons of macaroni products, while at the same time deliveries of these products from the other republics amount to 3,900 tons.

With respect to the interrepublic division of labor and present relations in industrial cooperation, RSFSR is the main supplier of many consumer goods in the industrial group to the other republics. This applies above all to cotton, woolen, and linen fabrics, cotton thread, rubber footwear, furniture, automobiles, refrigerators, sewing and washing machines, and many other products.

[Virkunen] Differing points of view are being expressed about regional and republic self-financing. Including even the idea of establishing intrarepublic circulation of money and establishing economic and even political borders between republics. The objective of setting up barriers between the republics is sufficiently clear—to shape in some limited territory a kind of oasis of abundance, but this would hardly be feasible without broad relations within the framework of the unified national economic complex, without specialization and interregional division of labor.

[Maslennikov] Yes, economic separateness is not the road that will lead to success. I have already spoken about the approximate scale of the losses that disassociation of the republics might bring about. Nevertheless, alternative viewpoints are still being expressed. My view is that they have not been substantiated soundly enough.

Our country has proven not only the viability, necessity, and advisability of socialist state unity of peoples, but also the real possibility of that kind of unity, in which there are no regions and must be no regions that build their prosperity at the expense of others.

For all the difficulties which have been encountered along our road, we are moving steadily toward achievement of that objective. The decisions of the 19th All-Union CPSU Conference confirmed that the integral national economic complex formed in our country is the material foundation of the unity of the peoples of the USSR.

The circulation of money in the USSR and the monopoly of the currency by the USSR State Bank are supposed to guarantee development of domestic and foreign trade and safeguard the country's economy against adverse manifestations of the capitalist economy.

In that context, proposals for establishing separate currency in the various union republics seem unconvincing. There is no doubt that this could result in dissolution of the present nationwide money system.

It is naive to suppose that within the framework of the country's unified national economic complex, at the present level and given the present character of the development of the productive forces in each of the republics, introduction of separate currency in the republics would automatically guarantee "sound money."

If the union republics each had their own currency, there would be a serious danger of severe restrictions in the trade of certain groups of goods, regional barriers would spring up in the distribution sphere, and relations among the nationalities would be weakened, which runs counter to restructuring and to the broadening of democracy and human rights. Such "innovations" run counter to present-day processes of integration.

[Virkunen] RSFSR is made up of 16 autonomous republics, 5 autonomous oblasts, 10 autonomous okrugs, 6 krays, and 49 oblasts. What prospects do you see for regional self-financing in RSFSR?

[Maslennikov] By comparison with the other union republics, RSFSR includes a sizable number of quite large administrative units. That is why in RSFSR the transition to the principles of regional self- government and self-financing can begin with separate regions.

It is advisable in the area of self-government to implement a set of measures related to placing on local authorities responsibility for management and guidance of sectors of the social sphere, the production and sale of consumer goods and services, development of the agroindustrial and construction complexes and the production infrastructure, as well as activity to protect natural resources.

We feel that for those purposes the supreme soviets of autonomous republics and the kray and oblast soviets of people's deputies must be granted additional rights to establish new organizational structures and forms for management of the economy under their jurisdiction. There should also be a change in the subordination of enterprises, and here guidance should be taken from the USSR laws on the state enterprise (association) and on the cooperative, as well as from the General Scheme for Management of the RSFSR Economy. In every city and rayon, there must be an economic and material base sufficient for self-financing and self-support and for carrying out social welfare programs.

As noted at the Extraordinary 12th Session of the USSR Supreme Soviet, 11th Convocation, the transition to regional self-financing is a part of the large and difficult effort to carry out the radical economic reform, which in turn is the foundation for our entire restructuring. This is, of course, something new and complicated. And if we are to work out a conception of its establishment that is correct and optimum and acceptable to all the fraternal republics, we need to have not just one version, but several. That is precisely what democratization of our society is all about. And in spite of the severity and even apparent extremism of certain points of view concerning this problem, I am convinced that a conception will be developed that will strengthen still more the unified national economic complex of the fraternal peoples of the USSR.

[Virkunen] Thank you for the interview.

Slow Pace of Economic Reform in KaSSR Noted

18200137 Alma-Ata KAZAKHSTANSKAYA PRAVDA in Russian 10 Dec 88 p 2

[Interview with T. Ashimbayev, member of the KaSSR Academy of Sciences, by a KAZAKHSTANSKAYA PRAVDA correspondent in Alma-Ata, date not given: "At Any Price?"]

[Text] [Correspondent] It is well-known that the first steps of the radical economic reform have so far not been evident at the level where people live. This fact is making some people doubt its success and even the very purposiveness of breaking up the existing economic mechanism. Is there a basis in your view for such doubts?

[Ashimbayev] Both yes and no. If you recall, the 19th All-Union Party Conference was critical of what had been achieved and outlined a clear course whereby social

production would achieve the parameters of sound growth. This is the main road of the reform, and it is from parameters related to quality that one can judge its success. The first thing one feels is the change in the declining trend of the growth rates of output, which was typical of the stagnant period. It is easy to follow the figures on how the republic's economy has been conquering the obstructions of that period. For instance, over the period 1986-1987 the national income produced grew 4.6 percent, which exceeds by 3.3-fold its average growth over the entire 11th FYP. The leading sector of the economy—industry—achieved a particularly vivid growth of output, and it is significant that it did so by raising labor productivity.

A second constructive trend: the decline of the output-capital ratio has been slowed. This was our scourge, the Damocles sword of the republic economy. Now the output-capital ratio is even rising in a number of sectors.

These are all results of the reform. And we must note that its development has been particularly furthered by the transition of enterprises to full cost accounting and self-financing. More than half of the industrial output in the republic has been produced by those enterprises. They have displayed both a higher rate of growth and also fulfillment of contractual obligations related to deliveries (by 99.5 percent in the 2d half of the year as against 97.9 percent in the 1st).

So that on the whole, we have to acknowledge that the economic reform has had a beneficial effect on the development of social production. But.... and it is here that we begin with the buts, which do more to feed the thinking of skeptics than they do to restore the economy to health. We will begin with an honest admission: the rates of development of production are impressive under the new conditions, since they were extremely low in recent FYP's. We will attempt with the same honesty to judge whether those rates meet the requirements of qualitative growth and what factors and sources of development have been set in motion. And we will see that there actually is basis for alarm as to the future of the radical reform.

[Correspondent] What disturbs you, an economist, above all a scientist?

[Ashimbayev] I will give you a straight answer: the goal is not clearly understood by everyone. Ultimately, the radical reform is aimed at a rise in people's well-being. If we keep this goal constantly before us, then the means of achieving it will become obvious. One of them arises out of the logic of the problem itself: we have to accelerate the return, that is, activate the intensive factors. But this is possible only on the basis of an acceleration of scientific- technical progress and optimum use of the production potential in place. This, after all, is the essence of qualitative growth. But in the period of the 12th FYP so far intensive factors have, on the contrary, been held back. There has been less effort to apply new technology, the effectiveness of outlays for new technology has dropped, the pay-off period of those outlays has become longer, and the pace of mechanization and automation of production has slowed down. The level of fulfillment of the plan for development of science and technology has thus remained at its 80-85 percent. A large number of scientific-technical target programs on whose development substantial energy and resources were spent have gone unfulfilled. Reconstruction and retooling of existing enterprises have been going slowly.

As for the utilization of the production potential, it seems to me that here we have not disrupted the traditions of the stagnation one whit. How much talk has there been about increasing the average number of shifts operated by manufacturing equipment! And so what has happened? It has not experienced any change at all at industrial enterprises. Metal manufacturing equipment, for example, is today being used at the level of the seventies. The growth of stocks of uninstalled equipment has not only not been halted, it has even increased; at the beginning of this year, it was 26 percent greater than in 1985. Just as before, attainment of rated capacities in production facilities and design indicators has been slipping. For this reason alone, the republic fell short more than 1 billion rubles of industrial output in 1987.

[Correspondent] It turns out that all the changes have taken place without using intensive factors, that is, the factors of qualitative growth. Does this mean that the rates of economic development have been achieved by virtue of extensive, quantitative factors?

[Ashimbayev] That is unfortunately the case. Extensification, just as before, is leading the dance, and what is more, for the first time enterprises are doing this in its worst version rather openly. The trouble is that approximately half of the growth was achieved by raising average wholesale prices and by "leaching out"—removing from the program products which are necessary, but inexpensive. According to the figures of the All-Union NII for Market Conditions and Demand, price changes last year increased personal expenditures for all goods, including foodstuffs, by 3 billion rubles. This year, according to preliminary data, they will increase another 2 billion.

[Correspondent] Can all this be explained in terms of the new economic system not being completed and the transitional nature of the period we are going through?

[Ashimbayev] Of course, the duality of principles in the management sphere cannot be denied today. At the same time (I will go back to the beginning of the conversation), when the old economic mechanism was in full force, in the context of the previous cost-accounting relations, which now have been rightly denied, we did not know the scale of the violations, say, of price policy and assortment policy, nor the gap between words and deeds, between important decisions and the departures from them, as we do now.

[Correspondent] What brought that about? It would seem, on the contrary, that everything must be put in place. A document has appeared which grants freedom to experienced enterprise on the one hand and on the other regulates rights and duties in the production sphere: the USSR Law on the State Enterprise (Association). Why is it not "working" for the reform?

[Ashimbayev] If we try to identify the main things that brought about the present situation in economic activity, then it is probably the one-sided view of the Law on the Enterprise as a law about rights. Which accounts for the selection of easy ways toward self-financing and the irresponsible attitude toward social interests.

Just remember: profit or income were recognized as the summary indicator of the economic performance of enterprises. But the sound basis for the growth of profit is the fullest utilization of scientific-technical and production potential and all-out resource conservation. This demands great efforts, optimum organization of production, which we did not all have enough of in the past. In making the transition to the new operating conditions with this "baggage," many enterprises did not take pains to overcome the inertia of the past. The previous approach, with its well-known slogan, "The plan at any price," was given a new face with another principle, equally alien to the interests of society: "Profit at any price."

[Correspondent] Yet the law imposes on enterprises an obligation to satisfy the needs of society to the fullest....

[Ashimbayev] Yes, and to combine the interests of the society, the collective, and the individual workers and to do everything to increase production efficiency on the basis of comprehensive intensification, and to constantly raise the technical level of production and to be concerned about its reconstruction and to raise product quality.... Many such good things were envisaged by the law. I would especially like to emphasize that "the enterprise is accountable for strict observance of price discipline and has an obligation not to allow prices to be hiked up."

But enterprises have been skirting these provisions and have been striving for easy gain. Judge for yourself: in 2 years, when industrial output in the republic rose an average of 4.5 percent, profit rose 14 percent. A dangerous gap has occurred between the rate of profit of production and the foundations of its growth.

[Correspondent] To a certain extent, one can understand the aspiration of enterprises to achieve high profit: the new cost-accounting mechanism and the Law on the Enterprise have not taken full effect. But is it possible for society to correct the actions of work collectives and others as well without obtaining the requisite return from the reform, and to take control of the situation that has come about in the economy?

[Ashimbayev] It can and must. See how slowly reconstruction of existing enterprises has been going, with departures from the principles laid down by the 27th CPSU Congress, how sluggishly machinebuilding has been retooling in spite of its crucial role in the economy, how high the rate of loss of production still is in the republic, although there has been abundant talk about reducing it, bringing it down to the minimum.... Like it or not, quite a few of the decisions that have been taken are being discredited and are not being implemented. Meanwhile, the limits of the shadow economy are spreading, and group egoism of enterprises and departments is developing—and this is occurring under the new operating conditions! Is this a paradox?

Given this situation, official authorities and organizations whose responsibility it is to stand watch over the interests of society, it seems to me, have been taking a waiting position, more accurately, a position of nonintervention. To some degree, this originates in a hope that the laws adopted in recent years will automatically operate. Many think that the new mechanism will itself have an impact and all that is left to do is to patiently wait until its fruits ripen. Let us go back to V.I. Lenin in this connection. Speaking about the fact that the apparatus of the state is called upon to protect the interests of the workers, Lenin emphasized: "...laws are not by themselves enough here; a great educational, organizational, and cultural effort is needed here, something which cannot be done quickly with a law, something which requires an immense and lengthy effort." That is what has slacked off at this point. Why? I see several reasons for it.

Administrative methods of management of the economy have recently been repudiated in every way: we have been referring to them as "pressure methods," "tyrannical methods," and "command-order methods." As a consequence, the role of administrative influence on economic activity has dropped off considerably, and economic methods in their new content, which arises out of the radical reform, have not yet been properly assimilated, and what is more, they are still halfway measures. We cannot but see this as one of the reasons for the clearly inadequate mastery of the present complicated situation in the economy.

Why are the so-called administrative methods of management bad? If they are applied on a fair and democratic basis, if they are based on economic laws, then nothing is wrong with them. If they contain quite a bit of voluntarism, if everything is permitted, if they suppress the individual and initiative, then they are bad for all these reasons. In speaking about the peculiar features of collective work, V.I. Lenin pointed out that it is necessary "to establish the strictest accountability for executive functions and unconditionally industrious, disciplined, and voluntary performance of prescriptions and orders necessary so that the economic mechanism truly operates the way a clock works."

The quality of any activity has always been largely determined by discipline, order, and organization, which are especially necessary under the new conditions. Unfortunately, in our republic the turnover of personnel increased at industrial enterprises between the 1st half of 1985 and the same period of 1988, various losses of worktime increased, and disorder in technological discipline has been occurring quite frequently in the context of state product acceptance. Fascination with talk about democracy cannot make up for discipline.

A certain drop in the level of exactingness and consequently of accountability for the state of the economy should in my view be attributed to the uniqueness of the moment we are living in: party authorities have been stepping away from economic affairs in order to concern themselves with matters of ideology, which is indispensable, but the soviets have not yet tackled economic affairs and have been more getting accustomed to them than occupied with them. The economy has always reacted painfully to any kind of reorganization. The sooner the division of functions among party and soviet authorities is completed and order is brought about in the structure of the administrative apparatus, the better it will be for economic affairs.

[Correspondent] Probably the worried state of the specialist and the citizen is helping not only to analyze the situation, but also to seek out possibilities for changing it. Where do you see these possibilities and where do you see obstacles to realizing them?

[Ashimbayev] The first thing that is extremely necessary now to deepen the radical reform is vigorous protection of the interests of society, organically combined with the interests of work collectives. There is no need to be a specialist here, specialists can be recruited to deal with local problems. The main thing is to feel responsibility for the destiny of restructuring and to have a clear awareness of its necessity. The absence of these conditions is in fact the main obstacle.

As for the specific problems which have priority significance to the qualitative growth of the economy, I would above all single out the vigorous use of the advances of scientific-technical progress. Doing without them is like cutting off the branch you are sitting on. Hiking up prices, violations of assortment policy, and other tricks yield a temporary benefit, but nothing more. Only scientific-technical progress determines steadiness and prospects.

Second. In evaluating the performance of work collectives under the new conditions, it is important to make the right choice of criteria and indicators of economic development. Quite obviously, the growth rates of indicators are important, but it is also important that they represent real consumer goods. That is why, in my view, we need to give serious thought to whether profit can by itself perform the role of the summary criterion. At present, for example, it is moving far faster than labor productivity, but that does not make it easier to carry on economic activity; a deficit hangs over us just as before. Reference to the rise of the productivity of social labor by utilizing scientific-technical advances seems more promising to me. At present, it is extremely low: only 26 percent. We should associate many of the troubles of our economy with this.

Qualitative growth is an imperative of the times. It is the only way to eliminate all the problems and everything that we are confronted with in sadly acknowledging our failure. What can hinder us in achieving that? Nothing except our own inertia, overorganization, and lack of initiative. But these things are in our own hands.

New Uzbek Commercial Bank To Support 'Innovative' Undertakings

18200149 Tashkent PRAVDA VOSTOKA in Russian 6 Dec 88 p 2

[Article by L. Levin, UzTAG correspondent: "The 'Risk Bank' Takes Risks"]

[Text] The USSR State Bank has approved the charter and registered the country's commercial bank—the Uzbek Commercial Bank for Innovations. The percentage of annual dividends—from 5 to 8 percent—was fixed at the meeting held of the stockholders and founders.

It has already been reported that such banks have become rather widespread abroad. In the United States alone, such banks account for half of all innovations in various branches of industrial and agricultural production. Even in our country, commercial banks played an important role in the years of the New Economic Policy. For example, the Central Asian Commercial Bank, which was active from 1920 to 1932, concluded mutually advantageous transactions with dozens of the country's banks and had its own branches abroad. In Afghanistan alone, there were six of them. Through them, the "red bankers" carried on business with customers in Persia, India, China, and other countries. The bank had its correspondents in London, Berlin, and other West European capitals.

For example, the net profit from transactions concluded amounted to more than 700,000 rubles in 1924 alone. The bank had a revolving line of credit in the amount of $500,000 U.S.

This excursion into history is not without purpose. The bank for innovations will largely adhere to the principles of its predecessor. What were the financial experts counting on when they proposed investment of the resources?

"Our initial capital is about 3 million rubles," says Yu. Gordeyev, the bank's director. "We will commit the money first of all to 'innovation'—updating, application, and implementation of innovations. Our experts study ideas, make expert evaluations of drawings and designs, and if necessary they buy a patent to the invention. The

council of stockholders undertakes to solve various problems without obtaining consent and financing from ministries and departments, with their bureaucratic principles of operation. The restructuring of the economic mechanism has advanced to the foreground the rapid reaction of all the spheres of the national economic complex to the conditions that take shape on the market. The heavy and clumsy banking system must be replaced by one that is flexible and efficient."

The bank's charter provides that its stockholders may be either enterprises and institutions or individual persons. The size of the minimum contribution is established at 100,000 rubles for the former, and there is no limit for the latter. The council of stockholders of the bank for innovations includes, for example, USSR Stroybank (its contribution is about 1.5 million rubles), the joint Soviet-Bulgarian enterprise for manufacturing computers "Variant," the design institutes "Uzgiproavtodor" and "Uzgiprotyazhprom," the Tashkent Excavator Plant, the Uzbek Republic Council of the All-Union Society of Inventors and Efficiency Experts, and others.

What is it about the new bank, for example, that interested the Tashkent machinebuilders; after all, the contribution of 100,000 rubles, given their difficult situation, could prove beyond them?

By no means. The charter provides priority financing to stockholders. They are given long-term credit. So that once it invested its 100,000 rubles, the collective of the excavator plant received a considerably larger amount to retool production. There was nowhere else from which it could get money. Add to that the 5-8-percent annual profit.... In short, there is a gain.

Banks for innovations are quite often referred to as "risk banks." There is some basis to this definition: As experience abroad has demonstrated, about 80 percent of the capital does not bring in a return. Nevertheless, in spite of the cases of "washouts," innovation does justify itself. They have distributed the resources as follows. One million rubles went into the reserve fund. This money is to be committed to particularly important projects. Another 1 million was deposited in Gosbank. This might be called insurance against a financial collapse. The rest has gone to finance projects, to purchase designs and ideas.

Ventures have already been determined. The bank is ready to finance the processing of tailings from the Almalyk Mining and Metallurgical Combine. According to the calculations of experts, quite a bit of valuable metal can be obtained from them. The money will go into the production of plastics for enterprises of Gosagroprom. Children's bicycles and special vehicles for letter carriers will go into production in the facilities of one of the Tashkent plants (we purposely do not give its name in keeping with a request from stockholders). Other proposals, an especially large number of them related to agricultural equipment, are under study.

The bank has a small staff. It employs only 30 specialists (for example, there are about 200 employees working in the Uzbek Republic Promstroybank). Moreover, the "management" consists of only three persons. They in fact are involved in evaluating the ideas submitted. The council of stockholders has set aside about 100,000 rubles to remunerate staff personnel. According to approximate calculations, the new bank's income next year will be 700,000 rubles, and its net profit 400,000.

"The funds which we are now receiving are clearly inadequate for operation on a broad scale," Yu. Gordeyev feels. "The question is now being decided of enrolling the USSR Ministry of Finance as a stockholder. Its contribution will undoubtedly be a substantial one. We will take a credit for the coming year in the amount of 5 million rubles from the republic's promstroybank. The resulting capital will be about 10 million rubles. Tasks of some complexity can be performed with resources on that order."

The new bank also has other advantages. The more stockholders it has, the more of its own working capital it has. Which means that there is no need to go out on the market and to obtain money at interest. Which leads directly to another problem—the stability of the ruble. To be sure, the question of foreign currency has not yet been resolved. Vneshekonombank, which is at the union level, still retains a monopoly over foreign exchange.

But should there be a need, supported by a straightforward calculation, it is ready to do business on a contract basis.

The bank for innovations has gone into operation. The people there are waiting for ideas: original, efficient, and risky....

AGRO-ECONOMICS, POLICY, ORGANIZATION

VASKhNIL Academician on Expectations of CenCom Plenum on Agricultural Issues

18240078 Moscow SELSKAYA ZHIZN in Russian 5 Mar 89 p 2

[Interview with Academician A.M. Yemelyanov, department head of the economics faculty of the Moscow State University, by the economics department of SELSKAYA ZHIZN: "What We Expect from the CPSU Central Committee Plenum: We Have the Right to Own!"]

[Text] **Workers of the country's agroindustrial complex pin considerable hopes on the upcoming CPSU Central Committee Plenum, which is to determine the country's agrarian policy. Letters from readers contain many suggestions, opinions and remarks on this account. The editorial board has summarized them. A.M. Yemelyanov, VASKhNIL [Academy of Agricultural Sciences imeni V.I. Lenin] academician and department head of the economics faculty of the Moscow State University, kindly agreed to answer readers' questions.**

[Question] Aleksey Mikhaylovich, how would you characterize the process of revolutionary perestroyka taking place in our society today?

[Yemelyanov] We have managed to do quite a bit in 3 years. Noticeable progress has been made in developing openness and truthfulness, and in the upsurge of people's social activities. The management mechanism is improving, and steps are being taken to eradicate the command-pressure methods of leadership. As a result of the changes being made during the 3 years, the production of grain, meat, milk, eggs, sugar beets and other crops has increased somewhat compared to the average annual indicators of the 11th Five-Year Plan.

Widespread glasnost has also shed light on the fact that for decades the Leninist agrarian program and V.I. Lenin's ideas about socialism as a system of civilized cooperatives have been distorted under the cover of loud phrases about the upsurge of agriculture. Now the task is to change the economic relations radically in the countryside and radically improve life in the countryside itself.

Perestroyka, as we know, is being equated to a revolution in its depth of reforms of our society. But the essence of any revolution comes down to a struggle for power and ownership—this is a truism of Marxism-Leninism.

Here the question arises: To whom should power and ownership be transferred? How? Are we not going backward? After all, the Great October Revolution already transferred both power and ownership to the people. The thing is that after Lenin, the domination of authoritarian, anti-democratic rule in politics and in economics led to a profound deformation of our entire system, distorting all its spheres. As a result, the people ended up alienated from both ownership and power. The people's representative bodies did not have real power. They merely formally approved that which was already decided beforehand from above. The real power was in the hands of the party and government apparatus.

Perestroyka is also called upon to return to our society an unblurred face of socialism as a humane system, a system of the people. Therefore, the party's course toward perestroyka assumes not a partial improvement, perfection of society, but its revolutionary transformation. And the main issue here is the transfer of power and ownership to the people.

[Question] How is this, as you say, main issue of perestroyka being resolved practically, through what specific forms?

[Yemelyanov] In practice, this issue is being resolved through assimilating new, unusual socio-economic forms of economic management. I have in mind the various forms of contract, including family contract, and the development of lease relations and cost-accounting. These forms promote the revival in rural workers of a sense of being the boss and help overcome the obliteration of personal responsibility and unwarranted leveling which have taken root and become the norm. Hence the high effectiveness of these forms.

One cannot be an owner at all. It is precisely here that our troubles lie. Depersonalized property is essentially no man's property. Hence this is what we encounter almost everywhere: The fertility of the land is falling or it is overgrown altogether, mismanagement flourishes, and equipment and fertilizer are used barbarously. Contract, lease and cost-accounting transform the rural workers from hired workers into true owners of property.

[Question] Letters to the editor contain many questions indicating a certain confusion of rural workers over the diversity of the new forms of economic management. Before people had time to fully understand "contract," a new phenomenon—"lease"—comes along to replace it. Which form is to be given preference?

[Yemelyanov] The main thing is not to allow stereotype. Our countryside has always suffered from this. Any good undertaking was often transformed into a union-wide campaign. As a result, it was discredited. We should support the diversity of forms of economic management. If a kolkhoz or sovkhoz establish large-group forms of organization and remuneration of labor, and they demonstrate their value and have an effect, it would be stupid in the pursuit of fashion to break down these collectives and artificially implant small-group and family contract.

That is how it should be, but it does not turn out that way in practice. Since the Belgorod meeting in 1983, we have all lived under the banner of collective contract. As a result, we turned this bottom-up movement into a campaign. Statistics show that almost everyone in the countryside is working on contract. But so far there have not been any appreciable results from it. The reason for this is formalism.

Here is an example. Not too long ago, I had the opportunity to be in one of the oblasts of the non-black earth zone. At a meeting, the managers of farms spoke unanimously that they were shifting from contract to lease. Here is what turned out at one kolkhoz. It was a good kolkhoz with a thinking chairman. They had all 36 of the machinery operators in one contract collective; and one hid behind the back of the other—there was unwarranted leveling. Then they split this brigade in two. And they want to decrease the size of the primary collectives even more, taking into account the nature of crop rotation and technology. They are not assigned to the land for a very long period, only 2 years. And that's all. Where is the lease here? You begin to examine it on its merits and come to the discomforting conclusion that this involves merely an elementary improvement of wages. And there wasn't any sensible contract system there before either.

[Question] What do you think about the development of the peasant farm in our country? To what extent will farming and the establishment of lease relations affect the practice of economic management of kolkhozes and sovkhozes?

[Yemelyanov] That is a legitimate and difficult question. We are now seeing in the press opinions about the advisability of eliminating economically weak, unprofitable kolkhozes and sovkhozes and about distributing them into lease. But in order to distribute those lagging behind, we must at least have sensible lessees desiring to take all these fixed assets and run a farm.

As experience shows, one can count the number of such lessees in the single digits. Forced distribution of public farms by individual farmsteads would essentially mean the same, sadly well-known collectivization, only the reverse.

The question of eliminating many kolkhozes and sovkhozes apparently stems from a one-sided understanding of lease. You see, it cannot be reduced merely to the creation of independent farms. It can also develop successfully within kolkhozes and sovkhozes.

The peasant farm is not the only alternative to today's inefficient kolkhozes and sovkhozes, but there can be a new type of kolkhoz and sovkhoz, representing an alliance (cooperative) of cost-accounting contract (lease) collectives.

But this should not under any circumstances deny the possibility of lease outside the kolkhoz and sovkhoz and the development of the independent farm or cooperative farm. One must take into account the specific conditions and, above all, the wishes of the workers themselves. If there are those who wish to leave the kolkhoz or sovkhoz, they should not be hampered. On the contrary, conditions equal with the kolkhozes and sovkhozes must be created for them. It should be taken into account that the logic of development itself will lead these independent farms to cooperation.

[Question] A question arises in connection with the development of the peasant farm: What socio-economic type of farm and what type of ownership is this?

[Yemelyanov] Apparently, this is a working peasant small-scale commodity farm based on private labor with government ownership of leased land. But this cannot be considered private property. You see, private property pertains only to supplemental, subsidiary activities. For example, the ownership of a private house associated with a private subsidiary farm. Ownership of a peasant farm applies to the basic production of these peasants.

A simplified approach to these fundamental issues will only be detrimental. Suffice it to remember the debate at the last session of the USSR Supreme Soviet, where they discussed an amendment to the Estonian SSR Constitution on ownership. One can agree or disagree with the Supreme Soviet of Estonia, but the problem nevertheless is knocking on the door. We cannot manage without re-examining many outdated, dogmatic theoretical tenets here.

A contradiction develops: In practice, we support development of the working farm. But we have not yet risen to a theoretical and political understanding of the socio-economic essence of this farm and its legalization.

[Question] The editorial board has been receiving quite a few letters in which our readers write frankly that there is much talk about perestroyka everywhere but little action. These reproaches particularly often concern the solution to the food problem. How would you assess this situation?

[Yemelyanov] First of all, I will say that such letters reflect the overall mood. Perestroyka is not worth much if it does not lead to an improvement in the real living conditions, above all in the main sphere for everyone—food.

During the years of perestroyka, as I already said, there has not been, unfortunately, a noticeable improvement in the supply of food. Certain positive changes in the build-up of foodstuffs have not been able to change the situation. What's more, coupons for sugar in many areas of the country have added to the already existing problems in the supply of meat, dairy and other products.

One must also take into account other negative trends affecting living conditions. Inflation is expanding, and there is a manysided process of price increases and erosion of an inexpensive assortment of goods. Shortages are gripping one sphere after another. Today, there are already problems with soap and washing detergent. What's next—salt, matches, bread?

The situation at store counters depends not only on how many products are being produced, but also on how much money people have and how the effective demand is met. Older people remember the comparatively good situation in food stores during the years of the 8th Five-Year Plan. There were much fewer products being produced at that time. For example, we had an average of 11.6 million tons of meat (dressed weight) in a year at that time, while in 1986-1988—18.8 million tons. There has been an increase, for sure. But personal income more than tripled during this time. This is the reason for the shortage in everyday consumer goods.

In recent years, there has been a strong trend of personal income increasing at an outstripping pace. Hence the food market is out of balance. I am leading up to the fact that it is virtually impossible to ensure balance in this sphere just by building up foodstuffs (although this is the main thing!) with the current inflation policy of money income.

Incidentally, inflation and price increases—this is an area which glasnost has hardly touched. The index of inflation and price increases is objectively calculated in practically all countries. Rise in inflation is not reflected at all in our statistics. As far as the retail price index is concerned, this is a half-truth, which is worse than a lie. The increase in retail prices is taken into account only for absolutely comparable products. But where will you find such products? Even in food products you can change some component, call a product "new," and increase the price, but this will not be reflected at all in the price index. Especially for consumer goods. And that is why the retail price index officially almost does not increase, although every one of us feels the increase boom.

[Question] In your opinion, what measures could tone down inflation and price increases? What must be done first of all?

[Yemelyanov] First of all, we must eliminate the state budget deficit. The country cannot live any longer in debt to its people. We must plan expenditures, adapting them to revenues. And all expenditure items on the state budget must be made public. We cannot limit ourselves to half-truths here.

Only last year, in 1988, we admitted that we had a budget deficit. As we know, the shortage of financial resources for 1989 will be 36.3 billion rubles. But the thing is, there are also the so-called loan funds in the amount of 63.4 billion rubles which are borrowed from the bank. This is the same budget deficit which for some reason is calculated under the item of Gosbank loan. But where will the Gosbank get these billions? That means another printing press will be put into operation, and the amount of money not secured by goods will increase even more.

We must learn to live within our means. To do this, we must first stop the multibillion-ruble projects and sharply reduce the volume of long-term construction, which involve tens of billions of rubles. How long will builders receive money for a hole that has been dug, for a pile that has been driven, and not for a project that has been turned over?

We should make major cuts in administrative and management expenditures and military spending, and place emphasis on developing defense matters on qualitative factors. The space program is also taking away too many resources.

[Question] Today, much is being said about reorganizing and reducing the State Agroindustrial Committee apparatus. What do you think, will this yield a real return? How successful, in your opinion, is the regrouping of the highest echelons of power in the country's agroindustrial complex?

[Yemelyanov] Reorganization of the State Agroindustrial Committee may not yield anything—just as its creation did not yield anything for the national economy—if it is conducted as it was earlier, according to the principle of "from top to bottom."

How do we usually do it? The task is set: Cut the apparatus by so much. But why that much? The personnel strength of the apparatus depends on the functions, the volume and nature of work. The functions are primary. The personnel strength of the apparatus is secondary.

All these issues can be resolved only "from the bottom to the top" by restructuring the entire management ladder system on cooperative principles. In restructuring management, we must proceed from the primary cost-accounting collectives of brigades, farms and links. It is the primary collectives that determine what functions to delegate to the kolkhoz and sovkhoz and what apparatus is needed at the oblast, republic and union levels.

In turn, a number of issues go beyond the farm, and they can be effectively resolved only through the general efforts on a rayon scale. And here the farms themselves, without directions from above, determine what rayon apparatus they need and with what it should be involved.

The interests of the rayon must also be represented at the oblast level. Again, everything must be determined from below: the functions of the oblast body, its composition, and the expenditures for running it. And it should be this way up to the republic and union level.

I have no doubt that the forthcoming CPSU Central Committee Plenum on agrarian issues will give new impetus to development of the country's agroindustrial complex and will become a visible landmark on the difficult path of democratization of our entire society.

Credit Arrangements for Lessees Explained

18200181 Moscow EKONOMICHESKAYA GAZETA in Russian No 4, Jan 89 p 5

[Article by USSR Agroprombank [State Agro-Industrial Bank] First Deputy Chairman V. Arkhipov under the rubric "Our Consultations": "Credit for the Lessee"]

[Text] *As can be seen from the editors' mail, no few questions relating to credit and banking support are arising among leasing collectives. At the request of the editors of EG, USSR Agroprombank First Deputy Chairman V. Arkhipov answers readers' questions on the specific features of the mutual relations of lessees with the bank.*

If a leasing collective, representing a team, shop, link, section, farm, cooperative, family or individual citizens, is a legal entity, an operating account can be opened for it at the bank at its request. Funds belonging to the lessees are transferred to this account.

[Question] What is the procedure for opening an operating account?

[Arkhipov] An application and the lease agreement (state document to the right of land use) are presented to the bank, as well as a special card with samples of the signatures of those individuals that will have access to the funds in the operating account. If the leasing collective does not have its own seal, the card can be without it. Account operations may be performed with the presence on the corresponding document (on a check, for example) of signatures whose samples exist on the card. There should usually be two signatures on documents, but there can be one as well. This should then be specially stipulated on the card with the sample signatures. The authorizations and signatures are witnessed by the lessor or notarized.

Funds may be issued from the operating account in cash or transferred by non-cash transaction at the request of the lessee. They may moreover be deducted from the account only with the consent of its owner or by decision of a judge or arbiter. It must also be noted that all payments from the operating account, including payments to the budget and on bank loans, are executed in the stipulated sequence.

[Question] Can credit be issued to leasing collectives?

[Arkhipov] Yes, those of them that have an account at the bank may enjoy the use of short- and long-term credit, naturally within the limits on credit resources prevailing at the bank. The amount of credit, deadlines for its repayment and other terms of borrowing are defined in the credit agreement between the lessee and the banking institution.

The substance of the credit agreement depends on the specific terms of activity of the leasing collective and its mutual relations with the bank. The credit agreement, however, should envisage without fail just what type of credit is being granted, short-term or long-term.

The agreement also contains the bank's mortgage rights to the material assets for which credit has been granted. This gives the bank the right to sell the material assets accepted in mortgage in the event of the untimely payback of the loan and thereby to extinguish the debt. The returnability of the loans issued is also ensured by a guarantee, also stipulated in the credit agreement. The guarantors of the leasing collective are the legal individuals with the corresponding funds at their disposal, which funds can be directed to pay off the overdue credit. The credit agreement also contains others types of provisions for the repayment of loans in accordance with the legislation of the USSR and the union republics, as well as the terms for insuring buildings, structures and other fixed and working assets created by means of credit.

[Question] What are the time periods for credit to lessees and for what aims might it be obtained?

[Arkhipov] Short-term credit, as a rule, is granted for a term of up to 12 months. Commodities and material assets being acquired by the lessee or work and services performed can be paid for through credit at the request of the lessee, or the loan obtained can be transferred to the operating account.

Long-term credit is issued for the construction, expansion and modernization of facilities or the acquisition of agricultural equipment and means of transport. The term of the credit is up to eight years, but no more than the term of the lease agreement. The loan is paid off starting with the second year after its receipt. Loans can also be used to pay for the formation of a primary livestock herd. The term of such credit is up to three years. The lessee pays the bank three percent a year for short-term credit and four percent for long-term. The rate scale rises to 10 percent with the late repayment of the loan.

Short-term and long-term loans are formulated in each case using liability obligations. They indicate the specific term for the payment of the credit.

[Question] How are the loans paid off?

[Arkhipov] They are paid off through deductions from the operating account. The grounds for this are the

liability obligations of the borrower. In the absence of funds in the operating account of the lessee, the debt is relegated to the overdue loans account and is paid off in the stipulated sequence.

The leasing collective may pay off short- and long-terms loans ahead of schedule. In that case they are paid on the basis of a payment authorization or written statement by the borrower.

[Question] Are new loans issued if there is overdue indebtedness?

[Arkhipov] No, new credit is not issued in that case. In an extreme case the bank may even sell property accepted as a pledge and pay the indebtedness from the proceeds of the sale.

It should be noted that the credit and transactions of kolkhozes, sovkhozes and other enterprises and organizations that have converted completely to leasing arrangements are accomplished on the basis of the prevailing rules for credit and transactions stipulated for the corresponding sectors of the national economy.

Organization of State, Collective Farms Streamlined in Kazakhstan

18200146a Alma-Ata KAZAKHSTANSKAYA PRAVDA in Russian 22 Dec 88 p 4

[Article by L. Devyatov: "Year of Cost Accounting"]

[Text] Since January of this year, the agro-industrial complex of East Kazakhstan Oblast has been operating under the conditions of cost accounting and self-financing. In just a period of several days, the work of all farms and enterprises of the republic's agroprom [agro-industrial committee] will be converted over to these principles. The experience accumulated by the residents of East Kazakhstan will in all probability prove useful to many.

We carried out our preparatory work for converting over to self-financing well in advance. Beginning with the second half of 1987, 12 of the more stable (from a financial standpoint) farms were converted over to cost accounting. Their operational experience was summarized within the oblast agroprom. Simultaneously, we analyzed the financial indicators of all of the oblast's farms and branches for the last 10-15 years.

Based upon the results of the above analysis, specific and realistic measures were developed for each farm and enterprise in the interest of raising their profitability and in the process the condition of the fixed and working capital, the productive forces and the natural-climatic conditions were taken into account. In the process, six farms having small production volumes and lacking good prospects for further development under cost accounting and self-financing conditions were disbanded and merged with economically stronger farms. Six rayon specialized farms and associations for the fattening and maturing of livestock, in the interest of increasing their production volumes, were reorganized into production sovkhozes together with the development of additional branches.

Following a study of several variants, differentiated bonuses were computed for weak farms for adding on to the purchase prices for products sold. Attention was focused on such indicators as the profitability of individual branches and farms on the whole, the amount of profit obtained, production volumes, non-production expenses, level of purchase prices and status of the social sphere. The level of the effective purchase prices was also taken into account. Thus, sovkhozes and kolkhozes in Samarskiy Rayon, which is located in the dry-steppe zone, had previously supplied the state with products at the same prices as those for farms in rayons having better natural-climatic conditions and, as a result, the economy of the former was in a strangulated state.

As a result of the new approach for distributing bonuses, at least in our opinion, success was achieved in creating a favorable start-up situation for operations under the new conditions for each sovkhoz and kolkhoz.

In the interest of studying more thoroughly the economic methods for administering production and the means for carrying out the economic reform, a personnel training program has been developed and is being implemented throughout the oblast. It encompasses all of the RAPO [Rayon agro-industrial association] chairmen and their deputies, sovkhoz and kolkhoz leaders, chief economists, bookkeepers, agronomists and RAPO and farm livestock husbandry specialists. Special attention is being given to economic training for workers and kolkhoz members.

Large-scale work was carried out in connection with radically changing the administrative structure of the agro-industrial complex. The number of administrative staff workers at the oblast level has been reduced by almost 40 percent and at the rayon level—by 43 percent. Moreover, the expenses for maintaining the staff were reduced by one half million rubles. And instead of stopping here, we are continuing to improve the administrative structure.

We are aware that the food problem can only be solved if the conditions required for the extensive development of economic administrative methods, for cooperation and for thoroughly verified lease relationships have been created on the farms and in the rayons and oblast. Thus, work has been organized directed towards converting the production subunits of farms over to a lease basis.

The new mechanism for production-economic relationships is presently being employed in agriculture by 2,846 (83 percent) subunits of sovkhozes and kolkhozes. More than 42,000 individuals (64 percent are workers) have been assigned to these collectives

The lease and family collectives have been assigned 630,200 hectares (73 percent) of arable land, 261,100 head (72 percent) of cattle and 1,603,300 head (98 percent) of sheep. On many farms, the lease collectives include specialists the wages of which are dependent upon the final results. This is forcing the specialists to concern themselves in earnest with the organization of production operations.

Thus, at the Paryginskiy Sovkhoz in Zyryanovskiy Rayon, all of the middle echelon specialists are assigned to the labor collectives in livestock husbandry. Unified accounting prices have been established for these collectives. Monetary advances are carried out on the basis of a single order and all-round estimates and the distribution of earnings—in accordance with a coefficient of labor participation. The conversion of farms over to complete cost accounting and self-financing and the organizational-economic measures that have already been carried out have made it possible to improve the financial-economic operations of sovkhozes and kolkhozes.

During the period of work carried out under the new managerial conditions and compared to last year, increases have taken place in the production of grain, potatoes, meat and milk. The plans for state purchases of buckwheat, livestock, poultry, milk and eggs are being over-fulfilled. For the very first time in the entire history of farming, 69,000 tons of sunflower seed, or 4,000 more tons than the figure called for in the plan, were delivered. The shipping of meat and milk to the centralized union and republic funds is being completed at the present time.

According to provisional data, all 86 sovkhozes and the 20 kolkhozes are completing the year with a profit of 117 million rubles. During the fourth quarter, these results may improve considerably and the profit obtained may be twice as great as that for last year. The profitability level for the sovkhozes will be 35 percent and for the kolkhozes—38 percent. The average profitability will be 36 percent (compared to 17.1 for last year, 14.6 in 1987 and an average of 12.7 percent for the 11th Five-Year Plan). Only one sovkhoz, the Bolsherechenskiy, had a profitability lower than 10 percent and seven farms had profitabilities ranging from 10 to 15 percent. The profitability for grain crops was raised from 54 percent in 1987 to 80.6, milk from 23.9 to 56.3, beef from 6 to 10.2, sheep from 21 to 59 and wool from 0.5 to 26.4 percent.

In construction, the plans for placing in operation housing facilities, schools, kindergartens, storehouses and many other installations were all fulfilled. Full use was made of the capital investments made available for these purposes.

The work carried out under the new managerial conditions has promoted a normalization of the financial situation and more complete use of bank credit. At the present time, the oblast's sovkhozes and kolkhozes have been supplied fully with their own internal working capital. There is no outstanding indebtedness in connection with bank loans, there are no unpaid obligations related to the principal operations or to construction and by the end of the year the indebtedness for short term loans will decline by 20 million rubles compared to 1 January 1988.

Certainly, we have still not succeeded in increasing substantially our production of goods and yet we are convinced that the work carried out under cost accounting and self-financing conditions and on the basis of lease contracts has made it possible to take the first and necessary steps towards lowering expenditures. The collectives, from top to bottom, are taking a closer look at their expenditures. On the whole, the sovkhoz and kolkhoz expenditures this year are lower than those for last year by the absolute amount of 39 million rubles and according to the planned prices—by 45 million rubles. Certainly, the reserves here are considerable. Moreover, some leaders and specialists have still not rejected the obsolete approaches and some of them are still prone to old thinking and parasitism. We are still encountering large unproductive losses. The immobilization of 4.1 million rubles worth of internal working capital in construction and 2.6 million rubles worth in capital repair work has been tolerated and the above-normative reserves amount to 6.9 million rubles.

In a number of areas we were unable to avoid mistakes in the distribution of differentiated bonuses added on to purchase prices. Thus some farms raised their profitability not by means of increased volumes or improved product quality but rather by obtaining unearned funds. These distortions will certainly be eliminated.

Measures are being undertaken aimed at eliminating other existing shortcomings. Special attention is being given to the formation of optimum size lease collectives on a strictly democratic basis, the interests of cost accounting collectives are being coordinated with the final results of their labor and the wages of leaders and specialists are being made dependent upon the operational results of lease subunits. Service branches are also being converted over to these principles. Work is presently being carried out in connection with strengthening lease relationships by leasing out land, livestock, equipment and other principal means of production for extended periods of time, with appropriate lease payments being made for their use.

We realize that the quality of our work is still low and that the manner in which we process our products is inadequate. Insufficient capabilities and their unsatisfactory use are exerting a braking effect here. The internal resources which we sought are by no means satisfying the complete requirements for funds for developing the base for storage and processing and it is obvious that if assistance is not provided by the republic organs in the near future we will be unable to solve these problems.

We see clearly the shortcomings in our work, we have a program for the future and we will work more persistently on this program. The carrying out of the plans as outlined will enable us in the near future to raise considerably the per capita level of consumption for all of the principal types of food products.

Pros, Cons of Agricultural Complexes Considered

18240040 Baku BAKINSKIY RABOCHIY in Russian 8 Dec 88 p 2

[Article by N. Kalkun: "Agrokombinats: Pluses and Minuses"]

[Text] Agrofirms and the Lenkoran Agrokombinat were set up in the republic at the beginning of the year. The agrofirms brought together producers of agricultural products with processors, and profitable farms with money-losing neighbors on the basis of several forms of lease—personal, family, contract.

What is the governing principle for gathering Lenkoran enterprises and farms under one roof?

There are 17 sovkhozes, 5 transport and service enterprises, mobile construction mechanized columns, all processing plants, factories and kombinats, a total of almost 40 large farm units. They are combined into the agrokombinat on a territorial basis.

A. Ragimov, director of the Lenkoran Canning Kombinat, reflects: "I think that in the next year a labor collective council will be created. It should use its legal rights and decide whether it wants to be a profitable independent canning enterprise or remain within the agroindustrial kombinat. Let the collective determine if it is advantageous, for example, to allocate 1.5 percent of its profits to the agrokombinat so it can manage them. The allocations remain with the financial organs. There is a tendency for supply services to gradually be eliminated, as in time there will be wholesale trade in materials and equipment. Will we then need formal subordination to the agrokombinat? All enterprises are now striving for independence."

Possibly the directors of processing enterprises in the rayon would have no doubts about including them in the LAPK [Lenkoran Agroindustrial Kombinat] if, at the year's end, canning operation managers were invited to discussions about this big organizational measure. At that time, the end of August and the beginning of September, the plants were dealing with a "minus." The canners did not want to become one of the enterprises threatened, for the first time in many years, with nonfulfillment of the state plan.

One can understand the rush by the creators of the Lenkoran Agrokombinat: They wanted to test the new form of economic management as soon as possible. Therefore, they did not succeed in doing some things and the manner was not thought out as well as it should have been. Also, the management structure turned out to be in a very difficult situation.

The managers of many enterprises in the Lenkoran Agrokombinat think that for a long time the RAPO sign had simply been replaced by the LAPK sign. A real concern was that help from republic Gosagroprom was insufficient. Of course, an important role was played by the imperfect structure of the APK itself. This was mentioned from the rostrum at the 19th All-Union Party Conference. The situation will undoubtedly stabilize with the completion of the general scheme for Gosagroprom. However, soon the tale will be told. Therefore, why try to understand what happened at the canning operations in the LAPK?

Prior to this year, when enterprises processing fruits and vegetables were attached to Glavplodovoshchvinogradprom [Main Administration for the Fruit, Vegetable and Grape Industry], this main administration planned their raw materials, machinery, packaging and everything necessary for normal functioning. Now that Lenkoran canners have become part of a newly created agrokombinat, they are out from under the micromanagement of this main administration. At the year's end, raw materials and equipment are planned for the next year. However, the LAPK was created by an order in December 1987, when there were delays in replanning from the main administration to the agrokombinat and not everything was done.

To fulfill its annual target for pickle canning, the canning kombinat has to process (and first obtain from farms) 2,300 tons of fresh vegetables. The Gosagroprom, however, is planning only a little more than 500 tons for the kombinat. Without the pickles, the remaining two-thirds of the planned volume will not be completed! The picture is similar for tomatoes.

To fill up the inter-season period, since 1981 canning enterprises in Lenkoran have been processing pomegranates and grapes. In 1987 the kombinat processed almost 15,000 tons of pomegranates and 3,000 tons of grape juice. It now does this work during the pre-winter, winter and spring periods. During the first half of this year 6 million rubles worth of grape and pomegranate juices, drinks and other goods were made. This is 40 percent of the annual plan.

However, in August and the first 10 days of September, canning plants and kombinats sat idle; they had not received grapes and pomegranates. Due to the creation of the agrokombinat this material had been planned for it, but forgotten. They also forgot to plan for three-liter cans, covers, sealing machines, autoclave systems and other items. This was even though the canners had been concerned since early Spring, sending telegrams and letters to the agroprom:

"Due to lack of materials, equipment will not be repaired and made ready for the season"; "An abundant harvest is expected. The plant is not ready to receive produce"; "The plant is idle for long periods due to raw material shortages."

As if these problems were not enough, because it had no raw materials the canning kombinat had to part with 400 workers, while the plant had to release 200. There is no other work in Lenkoran.

This was the situation prior to the beginning of September. Now managers at both canning enterprises have reported that, after preparatory announcements have quieted down, it has to be assumed that agropromsnab [agro-industrial supply] has finally been able to ship some three-liter cans from Simferopol. Metal items have been obtained—they even had to refuse additional stocks. The Main Administration for Planning Social and Economic Development in the APK and Glavplodoovoshvinogradprom were of real help in solving the raw material problem. Starting only on September 21 did each of the processing enterprises obtain its first few thousand tons of pomegranates. Nevertheless, the collectives were able to fulfill their targets for the first half of the future year.

"However, it is very necessary for stable, smooth work that we get orders and supplies directly from republic agropromsnab, and not through the agroprom supply service. This Lenkoran service has only two workers. It is simply not able to meet schedules in supplying materials and equipment for four dozen enterprises. We handle only perishible products," say A. Ragimov, canning kombinat director and V. Aliyev, canning plant director.

Of course, many problems at the Lenkoran Agrokombinat have already been solved, while others are being solved. Were mistakes inevitable? Wouldn't it have been possible to send the manager of the Lenkoran Agrokombinat to Poland to acquire experience a year earlier than November 1988? The "Zeytun" and "Kuba" Agrofirms, where structural consolidation was not territorial, appear to be more flexible and viable. Also, as reported by A. Kerimov, manager of the Main Administration for Planning the Social Development of the Agroprom and a big enthusiast for the creation of agrocomplexes, republic Gosagroprom is planning, in the not too distant future, to organize several kombinats similar to the one in Lenkoran. They are examining materials on the creation of such units in Kazakh, Tauz, Shakhor and Sheki. The famous Novomoskovskoye Agroindustrial Association in Tula oblast is doing economic studies on the creation of a similar association in Apsheron. The Institute for the Economics of the Republic Agroprom is working on a new system of integrated formations. First the creators of the new agro-formations intend once again to take advice from people who are to make the thoughts into reality. Hopefully, previous mistakes will not be repeated.

LIVESTOCK AND FEED PROCUREMENT

Livestock and Feed Situation in Early'89

Winter Farm Situation Discussed

18240073 Moscow SELSKAYA ZHIZN in Russian 28 Jan 89 p 1

[Official commentary by the RSFSR State Committee for Statistics, RSFSR State Agroindustrial Committee, and RSFSR State Agroindustrial Committee for the Non-Black Earth Zone: "Winter on the Farms"]

[Text] The positive trends in development of livestock raising in the course of this year's wintering remain: volumes of meat and milk production have increased. They increased most noticeably in Orel, Ryazan, Kuybyshev and Murmansk oblasts and in the Mordovian, Tatar and Kabardino-Balkar autonomous republics.

Overall, however, many opportunities still remain unutilized. The sale of livestock and poultry for slaughter and sales to the state have been reduced, compared with the corresponding period of last year's wintering, in farms of Tyumen Oblast, Maritime and Krasnoyarsk krays, and the Dagestan, Buryat and Yakutsk autonomous republics. The gross milk yields decreased in Arkhangelsk Oblast and the Buryat, Chechen-Ingush, Yakutsk and Komi autonomous republics.

The highest daily milk yields, within 7-12.5 kg, were retained in Leningrad, Moscow, Sverdlovsk, Murmansk and Magadan oblasts and the Mari and Tatar autonomous republics. The lowest yields, from 2 to 4 kg of milk daily per cow, during the first half of the wintering were received in Novgorod, Pskov, Kalinin, Smolensk, Yaroslavl, Kursk and Chita oblasts and the Dagestan, Tuva and Yakutsk autonomous republics.

Special note should be made that the Karelian, North Osetian, Chechen-Ingush and Buryat autonomous republics presently have more feed than last year, but the productivity of the dairy herd is still dropping. As a rule, this is a direct result of flagrant and numerous violations of the technology of caring for the livestock.

January did not improve the situation, and in a number of cases worsened it. With respect to the same month last year, there was less milk and meat produced this year in Arkhangelsk, Vologda, Pskov, Kalinin, Yaroslavl and Kirov oblasts and in the Udmurt, North Osetian and Buryat autonomous republics.

The barrenness of cows still remains high. During the past year, 2.9 million cows, or 18.6 percent of the total head, did not produce offspring on RSFSR farms. Even more—from 20 to 30 percent—did not calve in Tambov, Kostroma, Tula, Omsk, Ryazan and Tyumen oblasts and in the Kalmyk, Dagestan, North Osetian, Tuva and Yakutsk autonomous republics.

It now could have been possible to replenish feed supplies somewhat by using coniferous needles, twigs, and food waste, but their procurement was not organized on many kolkhozes and sovkhozes. Proper attention is not being given to feed processing. Thus, only 95 of the 169 feed-preparation plants were in operation in the Yakutsk ASSR, and only 8 of 12 in Privolzhskiy Rayon of Astrakhan Oblast.

In the conditions of this year's wintering, the most important thing is to maintain the achieved production growth rates. We must make more effective use of available feed resources and introduce more vigorously progressive forms of organization and remuneration of labor.

Livestock Breeders Contribution to Perestroyka Discussed

18240073 Moscow SOVETSKAYA ROSSIYA in Russian 24 Feb 89 p 2

[Article by Marat Glinka: "Livestock Breeders: Contribution to Perestroyka"]

[Text] A meeting was held the other day at the Kolkhoz imeni Lenin in Dzhidinskiy Rayon, Buryat ASSR. A candidate to the USSR People's Deputies was being nominated. The opinion was unanimous—Gombo Choydopov, the chief zootechnician. They knew on the kolkhoz that he was one of those who promotes perestroyka. Not by "bold" disclosures, not by loud shouts, but by day-to-day and seemingly unnoticeable, ordinary work so needed by our country, without slogans and appeals. Raise the milk yield of cows from 1811 to 3300 kg and almost double the delivery of this most valuable product to our tables—this is what we must be able to do. Such people can also decide the destiny of the country in its highest legislative body.

There are many of these people among the kolkhoz and sovkhoz livestock breeders. They worked pretty well last year. Together with the private subsidiary farms of the population they gave the cities and villages 19.3 million tons of meat (dressed weight). They produced more than 106 million tons of milk. These indicators are the most ponderable in the history of the country, as is the milk yield of cows, which reached 2799 kg. Production of another farm product and purchases of it by the state also increased—livestock and poultry (live weight) almost to 23 million tons and milk to 76.9 million tons.

In any event, it would seem that the livestock breeders can take a breath—they worked pretty well overall. But the times and the requirements are such now that there is no time to rest. The increase gained is altogether insufficient to somehow saturate the market and drive down the prices. The annual per capita consumption of meat increased only by 1 kg, but for milk it increased by 10 kg—this is totally inadequate. What is particularly worrisome is that this is a decrease in the rates of production output. Its quantity is increasing now, but much slower than, say, 1 or 2 years ago.

This winter is a serious test. Although the relative feed supplies are just a little below last year's levels for the country as a whole (10.8 versus 10.9 centners of feed units per head), in many places there is considerably less forage. Thus, supplies have decreased by 3 percent in the Ukraine and Kirghizia, 8 percent in Lithuania, 13 percent in Latvia, 17 percent in Belorussia, and by 30 percent in Estonia! A particularly alarming situation has developed in the Russian Federation on farms of the Northern and Northwestern economic regions, where there are less than 7 centners of feed units left per head. It can be said that desperate efforts are needed here to avoid a decrease in farm productivity.

Nevertheless, in the majority of cases it is simply necessary to put the farms in elementary order. That is how correspondents of SOVETSKAYA LATVIYA explain the reasons for the drop in livestock productivity; during the first 3 months of the wintering the republic lost 26 kg of milk from each cow, and gross milk yield dropped by 13,000 tons. In Madonskiy Rayon, building repair was not completed on time in some places, they were not concerned about transportation of feed, and they are slow in improving the working conditions of the milkers. In Rezeknenskiy Rayon, the percentage of cows not calving is high; some farms are getting 60 or less calves from every 100 cows. So the problem is not just with the feed.

The level of productivity of farms by no means always coincides with the supplies of forage. Belorussia, for example, managed during the first 3 months to maintain milk production at the same level of the preceding year, and the cows' milk yield even increased. And in January, their productivity in all the republic's oblasts, other than Brest and Gomel, was higher than last year. Things are the same on Lithuanian and Kirghiz farms, where the gross milk yield has been maintained at the previous level or has even increased somewhat, despite the depleted forage funds. In many autonomous republics and oblasts of Russia, such as the Mari, Mordovian, Chuvash and Udmurt autonomous republics and Bryansk, Vladimir, Gorkiy, Belgorod, Kuybyshev and Orenburg oblasts, productivity of the milk herd during the period cows are kept in stalls increased, even with a poor feed supply. Conversely, there are directly opposite examples in which farms have more forage than last year, but their productivity is much lower. This was the case on a number of farms in Georgia. The winter milk yields fell in the Karelian ASSR, Astrakhan and Sakhalin oblasts, and the North Osetian, Chechen-Ingush and Yakutsk autonomous republics, even with large feed supplies.

This lag can be explained in different ways, and it can be fought in different ways. In Kokchetav Oblast, for example, specialists of the Oblast Agroindustrial Committee,

despite all the bans, established daily reporting on the work of feed-preparation plants. They require every rayon, which in turn require the farms, to provide information not only on the number of units operating, but also on the amount of feed mixes prepared on them in a day. I can imagine how much effort and time is spent on this by local workers to no benefit! In Lvov Oblast, reports were heard from a number of managers, with reprimands being given to the most "outstanding," with and without entries being made, and being warned that, based on the results of the year, "the question will be raised concerning the feasibility of their remaining in their positions." Overall, they tried to "make maximum use of the winter period to create among the laborers of the countryside a situation of labor tension," although, in my opinion, it would have been much more beneficial to create a calm, businesslike situation and conditions most greatly favoring all who are associated with livestock breeding. You see, they have to work under quite intense conditions even without "creating tension."

In the Mari Autonomous Republic, long renowned for skilled and sharp livestock breeders (remember that industrial methods of milk production came from here from the Semenovskiy Kolkhoz), there would seem to be no reason to urge on the farm workers. Last year, they produced 3277 kg of milk from each cow, increasing their average productivity by "three twos"—222 kg. Milk production increased almost 7 percent during the year, and these indicators have even increased during the period the cows have been kept in stalls—and this with a considerably smaller supply of feed than 1 year ago! Local managers did not hold back, not by any means; they arranged for the collectives to make increased commitments. It was as if each commitment was written by the same hand. In each of them, like in the better years of stagnation, there was a mandatory line—we will fulfill it ahead of schedule by some or other festive date. A continuous anniversary celebration!

How alive this habit is to excessively organize everything. In January, the milk production began to drop at kolkhozes and sovkhozes of Novgorod Oblast, and the deputy chairman of the Oblast Agroindustrial Committee, N.E. Draze, immediately issues a recommendation: "Economic bodies are obligated to hold strictly accountable those managers and specialists whose lack of concern led to the decrease in milk yield." Comrade Draze himself should be held accountable: How did it come about in the oblast that only 9 percent of the hay, 25 percent of the haylage and 38 percent of the silage is considered top grade.

Of course, in livestock breeding—a sector with a particularly delicate technology—one cannot get by without the advice of a specialist. His assistance is especially needed by the winter farms. But it is precisely assistance that is needed—knowledge, experience, example, action—not peremptory shouts and dressing-down, not command and urging on. The fate of perestroyka is being decided in the sphere of material production, in livestock breeding—directly on the farms and complexes. The farm workers have achieved much. But they have considerably more to do.

AGROTECHNOLOGY

New Fertilizer Ministry Role with Enterprises Proposed

18240038 Moscow EKONOMICHESKAYA GAZETA in Russian No 48, Nov 88 p 14

[Interview with Nikolay Mikaylovich Olshanskiy, Minister of the USSR Ministry of Mineral Fertilizer Production, by A. Leshchevskiy: "Instead of the Ministry"]

[Text] *At first glance the measure promised to be quite ordinary. The board of the USSR Ministry of Mineral Fertilizer Production, traveling around and inviting chairmen of councils of workers collectives in the sector, decided to discuss work plans for the following year. Unexpectedly, N. Olshanskiy, the minister, suggested talking about something else, about restructuring the relations between enterprises and the sector staff and transforming the ministry into a concern. The discussion became heated; everybody in the hall was interested. We asked Nikolay Mikhaylovich to make his suggestions more specific and to answer a few questions.*

[A. Leshchevskiy] Your ideas were like a bolt from the blue (I was convinced of this). The first reactions were the same: It's worth thinking about. Why do you think this is so?

[N. Olshanskiy] Because directors and chairmen of the STK [Councils of workers collectives] feel that the habitual relationship between the ministry and enterprises has to a great extent become obsolete. This means that it is necessary to find something new and appropriate to the economic management mechanism which we are creating in the country's economy.

[A. Leshchevskiy] These innovations do not have to be similar to the present ministry. Possibly the concern can be a more suitable management form? Will you explain it in more detail.

[N. Olshanskiy] With pleasure. First, however, I want to stress that we still do not have a final scheme. I can tell you what it looks like to me. Something else, the term "concern" is used as a conditional designation for a future association. We have to decide what it will turn out to be.

The "head" of the concern is the session, which will include a director, chairmen of councils of workers collectives at all enterprises, and scientists. They meet at least twice yearly and determine strategic tasks.

The session elects a board and sector council. The board (15 people) guides concern work and is accountable to the session. The sector council (35-40 people) is essentially a consultative organ to the board. It should include a director, chief engineers, economists, scientists and builders. The board helps in the work of the apparatus, the size of which is approved by the session. In my view, 600 to 800 people would be sufficient.

[A. Leshchevskiy] Not more? This is the ministry's practical staff. Will there be fewer managers?

[N. Olshanskiy] There will be. In my opinion, the concern apparatus should not be in Moscow, but in one of the large enterprises in the sector. It would simultaneously be the the apparatus of the concern and this enterprise.

I will use an example to explain. In Voskresensk there are two of our giants—the Minudobreniya [Mineral Fertilizer] and Phosphate Associations. One of them has 600 people on the management staff, while the other has 300. And, yes, there are 1,000 in the ministry. About 2,000 people altogether. Perhaps 1,500 will remain, assigned to the concerns and enterprises.

You understand, that I used Voskresensk only as an example. I could similarly used Tolyatti, Cherepovets or Sumy...

[A. Leshchevskiy] How will this new structure fundamentally differ from the fertilizer ministry?

[N. Olshanskiy] First of all, the management apparatus will be harnessed together with the enterprise. Today we rely on the budget. Our salaries do not depend upon the sector's operating results. It is no wonder that the director is always running three days behind other workers. What if the managers knew that the bankruptcy of plants threatened them not just with the loss of bonuses, but with the means of their existence? In my opinion, their attitude towards work would change radically.

Also, the concern apparatus would free labor collectives in the sector from some of the functions they have assumed, supply, for example. Enterprises must be relieved from the need to find materials, spare parts and equipment. Ideally, they should have one concern—producing goods, just like our foreign competitors.

There is one other difference. It is considered essential that concerns organize their own bank. It is possible to extensively use the free resources of enterprises. Naturally, this must be done on a mutually profitable basis. A plant should be able to get its money back upon first demand. It is also necessary to stipulate the guaranteed allocation of concern money to the budgets of their regions and the state.

[A. Leshchevskiy] Nikolay Mikhaylovich, you have already mentioned competition. Can you talk a bit about the foreign economic activities of a future concern. Can it help in our becoming a trend setter on the world market?

[N. Olshanskiy] As to that I cannot say, but I more confidently feel that it can and must. Of the 5.6 million tons of ammonia which annually circulates in the world market, we produce 3.5 million tons. We should dictate the price, but others dictate it for us. The situation is similar for several other products.

[A. Leshchevskiy] What is hindering us now?

[N. Olshanskiy] And who will dictate? The ministry. It is essentially without rights; it is the sum of plants and associations and does not make up an integral whole. Enterprises? Not a single one of our giants is comparable to a large foreign firm, with its science, industry, foreign trade centers, ports, ships and representitives throughout the world. What enterprise of ours is capable of maintaining this? None, but a concern could. This is why it is necessary to create such a concern and apply the law on state enterprises to it. Then there will be a unified economic management mechanism. However, each of the associations in it should have equal legal rights.

Also, with an eye to the future, we are now thinking about opening an office in Sao Paulo. It is assumed that it will open its doors in the first half of 1989.

[A. Leshchevskiy] So, your idea was approved by the sector's labor collective leaders. What is next? When will there be a founding conference?

[N. Olshanskiy] In the next few days we are inviting scientists directors and economics deputies from several enterprises to make a detailed description of the economic management mechanism for the concern. The draft plan will be sent to enterprises in the sector for discussion in labor collectives. Comments and suggestions will be gathered. If the government and workers in the sector approve the draft plan, the founding conference will be in the first quarter of 1989.

[A. Leshchevskiy] All that is left is to wish you success in this undertaking.

[N. Olshanskiy] Thank you.

POLICY, ORGANIZATION

Formation of Consumer Societies Noted

Action Group Open Letter

18270034 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 17 Dec 88 p 3

[Letter to editor and editor's note: "In Defense of Consumers' Rights"]

[Text]

Letter to the Editor

Dear Comrades!

An action group founded for the purpose of creating a new social formation—an association of consumers of goods and services—is appealing to you. Our goal is to lend support in every possible way, by joint efforts, to the restructuring of one of the spheres most vitally important for each of us—the sphere of consumption and services, and to provide collectively for the protection of your consumer rights, interests and needs.

Activists of the consumer movements of Moscow, Leningrad, the Ukraine, Belorussia and Lithuania, as well as the AUCCTU, the Komsomol Central Committee, the Committee of Soviet Women, the All-Union Council of War Veterans and Veterans of Labor, the Soviet Children's Fund imeni V. I. Lenin, the USSR Union of Journalists, the editorial boards of EKONOMICHESKAYA GAZETA, SOTSIALISTICHESKAYA INDUSTRIYA, SOVETSKAYA TORGOVLYA, and the weekly NEDELYA are the initiators in the creation of the consumers' societies.

USSR Gosstandart [State Committee for Standards], USSR GKNT [State Committee for Science and Technology], USSR Minyust [Ministry of Justice], USSR Mintorg [Ministry of Trade], USSR Tsentrosoyuz [Central Union of Consumer Societies] and the USSR Union of Designers are ready to extend their assistance in creating a union of the societies. The new movement is gaining strength.

The action group was formed from representatives and activists of this movement. At our organizing meeting we examined the main directions for forming consumers' societies and expressed the idea that the purposes, tasks and principles of the societies' activity would be determined by the movement's activists themselves.

In appealing to you, to all activists of the consumer movement, and to all social organizations, we call upon you to participate most actively in the discussion of a draft of a model statute for USSR consumers' societies, which will be published in the central and local press. After wide discussion of the draft, consideration of your opinions and advice and of experience in operation of the first clubs and societies of buyers, we propose to create in the middle of next year a constituent conference of the USSR Union of Consumer Societies.

We await your suggestions.

[signed] The action group. (Our address is Moscow, 117119, Leninskiy Prospekt, 42 VTsSPS.

From the editorial board. Our newspaper is ready to grant the use of its pages for a comprehensive and deep discussion of this important document. Send us your suggestions and comments. Let different opinions and views come together on our pages. That will be a more dependable path to the truth.

Model Draft Statute

18270034 Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 17 Dec 88 p 3

["Draft: A Model Statute for USSR Consumer Societies"]

[Text] USSR consumer societies* are voluntary, independent, self- controlled social organizations that unite citizens with a view to joint protection of their rights and interests as the consumers of goods and services.

The societies are guided by the USSR Constitution, Soviet legislation and their own charter (or statute).

1. The Main Tasks of Consumer Societies

The creation of organizational bases for public protection of the rights and legal interests of consumers in regard to satisfaction of their needs for good-quality consumer goods and services and high sophistication of servicing, and the presentation of consumers' interests to state and economic organs.

The study of public opinion about the consumer properties, variety and quality of consumer goods and services for the public, and the prices and rates for them. The organization of an independent advisory for goods and services. And evaluation of saturation of the consumer's market with goods and services.

The provisioning of objective consumer's information about the variety and quality of goods and services.

The extension of juridical, consumer-appraisal, and other advisories and services.

The dissemination of knowledge about consumers' rights. Editing and publishing activity, including the issuance of popular and special literature. The organization of conferences, seminars, and lectures about consumers' rights. And the use of mass information media for propaganda for consumer sophistication and for rational methods for managing the household and the family budget.

Help in developing scientific research on problems that touch on the interests of various consumer groups, taking into account the particular interests of their ages, nationalities and vocations.

Provisioning for priority protection of the interests of low-income families, the disabled, children, and the aged.

Collaboration with foreign consumer unions and associations.

2. Organization and Management of the Societies' Activity

Consumer societies and their elective organs operate on social bases.

The societies' activity is constructed on the basis of individual and collective participation. Any USSR citizen can participate in the work.

Consumer societies can be created at the place of residence, as well as by citizens who have common interests, and they are joined together in rayons, cities and towns, oblasts, krays and republics.

General meetings, conferences and conventions are the society's highest organs.

In between meetings, conferences and conventions, collegial organs or persons authorized by the meeting, conference or convention perform executive and supervisory activity.

3. Legal Standing

Consumer societies and their associations can be juridical persons.

4. The Societies' Funds

The basic sources of funds for the societies are:

—income from publishing, consultative and other types of economic activity;

—voluntary dues of citizens and social and economic organizations;

—subsidies of state organs.

The societies' funds are spent on:

—rendering consultant services on the quality of goods and services;

—the publication of informational and manual materials;

—the conduct of conferences, seminars, consultations, and lectures;

—other purposes set by the charter.

5. Cessation of the Activity of Societies

Societies cease their activity at the decision of a public meeting, conference or convention.

Footnote

*Clubs, associations, societies, councils, and so on.

Consumer Society Goals

18270034 Moscow LITERATURNAYA GAZETA in Russian 21 Dec 88 p 10

[Article by A. Auzan, candidate of economic sciences: "The Third Attempt"; words in boldface as published]

[Text] Once more about what a consumers' society should and should not be.

"It's up to the drowning man to save himself." In being guided by this old truth, society has now taken upon itself correction of the results of the command and administrative system's activity of many years standing, creating for this purpose ever newer and newer social organizations. On the agenda is the matter of an institution of wide association of consumers (see LG [LITERATURNAYA GAZETA] of 2 November 1988, the article by A. Rubinov, "The Tomcat in the Bank"). It is not the various clubs and societies that are already growing, like mushrooms after a warm rain, but an independent large-scale organization capable of becoming an influential force in the country's social and economic life.

This question, let us speak frankly, is not new. I have in mind not just the proposal of Litgazeta [LITERATURNAYA GAZETA], which was discussed and rejected 20 years ago. During an even more ancient period of our history, practical attempts were undertaken to create consumer associations. From the first attempt there remains in memory only the mysterious expression "EPO," which was carried over to our time in books about the civil-war years. EPO was the "United Consumer Society," a nationwide and dues-free consumers' association announced by 1918-1919 decrees. It was conceived as a mighty organization to replace traditional trade by the "planned distribution" of consumer goods. In fact, it did not go beyond monitoring ration cards for scarce items, and early in the 1920's this institution quietly disintegrated.

A more meaningful trace has remained from the second attempt. The bureaucratic structure of Tsentrosoyuz [Central Union of Consumer Societies] has until now towered as a monument to the consumer movement of the 20's, surprising a few of the curious with its full name—"The Union of Consumer Societies"—and raising the indignation of many by its clearly anticonsumer policy of price markups for all and on everything. But

indeed there were bright times in the life of this organization, when it represented a vital consumers' movement that used the forms of buyers'cooperative associations.

The dramatic conclusion of the second attempt was associated with the subordination of the cooperatives of enterprise administrations and the triumph of the principles of closed distribution by agencies—"closed worker cooperatives," and "closed distributors," and then workers' supply administrations and sections. The matter of the degeneration of the consumers' movement was completed by a decision of the Sovnarkom [Soviet of People's Commissars], which in 1935 exiled Tsentrosoyuz to the village, where the last vestiges of democracy were suffocated by a chronic lack of commodities.

Now we stand on the threshold of a third attempt. The kudos for the pioneers no longer threaten us—the problem now is the application of modern forms of consumers' organization, which have been propagated in almost all developed countries and even in underdeveloped countries, to our conditions. Knowing the sad results of the previous attempts, it is difficult to maintain a spontaneous feeling of enthusiasm. Will not this undertaking collapse once more into the deep abyss of shortages? Will it not become entangled in the labyrinths of shortages engendered by a distorted economic ideology? For even nowadays, let us say, closed "clearance sales" at enterprises and institutions are perceived by some as hardly being new and progressive forms of service or an unprecedentedly democratic measure, but the unification of foodstuff orders delivered to the place of work.

Monopolies and shortages—it is precisely between them that the ship of the consumer society that is now being designed is to come apart. And while "antimonopolistic" tasks bring together to a great extent the conditions of our consumers' movement and the West's, it is the shortages that are ours—homegrown and specific.

But then, even monopolies in our country are quite original. In addition to the administrative monopolies of agencies, which are well known to us, we nowadays encounter a new economic form of monopoly of enterprises and an unparalleled split in economic consciousness. In mastering the new rights of economic independence, we do not have anything against raising earnings through higher prices for commodities and services supplied us. But in going out the gate, we become fervent opponents of raising prices for consumer output. Concerted work on sawing off the branch we are sitting on proceeds increasingly strongly and, I am afraid, comes close to a fatal result.

It is impossible to stop this fascinating activity with sermons about the fact that the principle of enterprises paying for themselves should not be transformed into self-ruination of the customers and that not one people in history has been able yet to get rich by bankrupting themselves. This absurd splitting of public consciousness reflects the unfinished state of a mechanism that has furnished resources for observance of the producers' interest but has not provided the customer with the means for self-protection.

Without organized resistance by the customer to the dictates of the producer and of commerce, hopes for beneficial characteristics in the competition of enterprises will simply remain a new phenomenon of religious feelings in the economy: previously the plan was idolized, now it is the competition of the market. The fact is that there is still a competition of customers and not of producers. Mesmerized by shortages, customers, in pushing each other aside, grab everything. What is the difference in television brands when all the television sets have been bought out!

Until now shortages have engendered only those forms of consumer organization that were directed toward the division of what the command economy had given to its stepchildren. Lines (or in accordance with a list, and with roll calls) and bus "excursions" for items in large cities are at one pole, and institutional privileges of "special supply" at the other. Anatoliy Strelyanyy once let drop an ironic phrase about "crowds of associated customers who are looking at each other's plates." Perhaps the plates of some "special buffets" should be looked at, but the actual aims of the consumers' association should not at all be that of creating a grotesque organization of mutual surveillance but that of making a radical change in the civil status of the consumer.

A large-scale organization capable of exerting the consumer's influence on production and supply could unearth many roots of shortages. For shortages do not always stem from the fact that production is not active. On the contrary, in some places it is literally red-hot, straining to put out increasingly large amounts of output that is not needed very much and is of low quality, which thus is lost, to rot or be stolen in supply, like skimming the cream off slightly spoiled milk. The organizing efforts of consumers associations, in correcting the variety and quality of the conditions for transporting and selling, can in and of themselves exert a "productive force." But who creates such an organization, and how is it done?

A discussion of organizational questions of the consumers' movement has already begun in the USSR. In October, at a roundtable discussion at EKONOMICHESKAYA GAZETA, the participants agreed that the new organization should, above all, be independent of any kind of sponsors or institutions that are assigned this role by organizations. But there also was another meeting, the results of which were not publicized by the press. At this second meeting a whole organizational plan was adopted which clarified the matter of who will be united with us and organized and how it will be done.

The meeting, which was convened under AUCCTU's aegis, first of all had to reject the AUCCTU's claims to aegis over the consumers' society. It had to reject these claims on the basis of the fact that the trade union also is the supplier of definite services to the consumer and, consequently, can turn out to be on the other side of the counter from them.

I dare to propose for the reader's attention some organizational principles for the consumers' association that "are not AUCCTU- oriented."

The consumer's society should be **independent**, not simply self-supporting." The idea of being self-supporting is quite applicable to state enterprises, but we and you are not, thank heaven, objects of state property. The assistance of various organizations and agencies in this matter can prove to be useful, but their authority over the consumers's associations should be turned down. If you want to take part in this business, join the action groups, but as private persons, as consumers, not as authorized representatives of the "natural enemies," the opponents of the consumers' movement.

Moreover, the consumers' society should be an organization **of movement**, not one of stagnant overbearing structures. It should lend scope to the consumers' movement in diverse forms—the ideal of a patterned organization could easily strangle a lively consumers' movement. Therefore, membership in the association should be direct, while the forms of organization within it can appear in different variants. They can be clubs (or classroom and correspondence courses) engaged in propaganda for the goals of the consumers' movement and with a connection with the press. They can be local control groups or committees for the protection of consumers' rights, which monitor not only the presence of the "mandatory variety" and observance of the official listed prices but also wholesale deliveries to stores. They can be revived consumer cooperatives which, based on down payments, conclude contracts for deliveries from the direct producers of scarce goods.

As for rayon, city and other associations, they should be established as necessary and not by a mandatory statutory procedure. It will be necessary to create them but not necessary to eliminate them. The association needs a central coordinating council, of course, but it is needed not as a command center that sends customers to the barricades by directive. Its function will be the development of economically accountable methods for independent expert advice on prices and quality of goods and services, participation in the updating of standards, the development of legislative actions in the consumers' interest, a generalization of experience and the conduct of "antiadvertising" (right up to the announcement of boycotts) through the society's press organ. Just like the association itself, this press organ is needed not the day after tomorrow but today. More precisely, it was needed the day before yesterday, even if it is not multicolored.

No monopoly of any kind in organization of the consumers' movement can be tolerated. All its forms should be open for membership: even if a society is established on the basis of a definite working collective, it should admit those from outside who so desire, otherwise new "feeding troughs" will arise under the roof of these societies, and we indeed still have not eliminated the old ones.

In order to avoid a monopoly, one should permit even the forming of some alternative consumer associations based on various organizational principles. Consumers must be emancipated to the maximum by all possible means, otherwise monopolies will trample them down, shortages will swallow them up, and bureaucratism will overrun them, as has happened twice already in our history.

And so the clock has started running. The third try is underway....

Function of Consumer Protection Organization Clarified

18270032a Moscow ARGUMENTY I FAKTY in Russian No 30, 10-16 Dec 88 pp 6-7

[Article by L. Bochin, candidate of economic sciences: "The Consumers' Union: Opposing the Producer's Dictates; Because of the Lack of Choice of Goods, Nearly 35 Percent of Purchases Are Made out of Necessity"; first three paragraphs are ARGUMENTY I FAKTY introduction. Passages in boldface as printed]

[Text] **"Calls for the establishment of a Consumers' Union have begun to appear now in newspapers, including also AIF [ARGUMENTY I FAKTY]. But how can one speak of any kinds of consumers' rights, when there is frequently nothing to consume? What is to oppose the producer's dictates under such conditions?"**

[signed] **S. Kurilko, Kiev**

We asked L. Bochin, a candidate of economic sciences, to respond to the reader.

Of course, we are in a difficult situation. But, indeed, silence is also not the way out. All our plans are of a volume nature, even the latest decree regarding the expansion of consumer goods production. The producer ministries "forget" about assortment programs based on a thorough study of consumer demands.

As before, outdated and poor-quality household appliances are being foisted on us. This is being justified by the shortage of specialized enterprises and other reasons.

We Must Protect Our Rights Ourselves

If we tolerate slipshod workmanship and disregard of our demands, we will never have consumer respect. We must unite and establish ourselves as an equal partner with the

producer in the goods and services markets. This is especially important now, during the period of reorganization of the economic mechanism, when many enterprises are attempting to shift the difficulties of the transition period onto the consumer's shoulders. And a market without feedback—the consumer's reaction—cannot function normally.

By the way, in [other] socialist countries, for example, in Poland and China, the market is also not too saturated, but the consumers in these countries are actively protecting their rights.

Scarcity Is Not An Obstacle

And it all begins with the fact that the chairman of the All-Poland Consumers' Federation is a Sejm [Polish Assembly] deputy.

The leadership of the federation's national council participates in the work of many of the central economic organs, which makes it possible to influence directly decisions which touch on the consumers' interests.

The Polish consumers have secured the establishment of state funds for improving the quality of defective products—through fines from negligent enterprises. Under the conditions of scarcity of many goods, they struggle against the wiping out of the inexpensive assortment and actively participate in the awarding and withdrawal of the mark of quality [seal of approval] for goods. The federation has achieved, for example, the elimination of the 10-percent surcharge on the price for an automobile—for the so-called "automobilization" of the country (in our country, this can be compared with the warranty repair cost included in the price of household appliances).

The consumers' clubs actively participate in the work of the local trade administration organs. In particular, at the urging of the Krakow club, several negligent managers of commercial enterprises were replaced and the club contributed to the improvement of the quality of tourist services.

At the beginning of 1987, an independent Goods Quality Standardization Center was established in Krakow. Using various tests, the center's researchers conduct an appraisal of the assortment and quality of goods and, using the mass media organs, bring the results of the tests to the attention of all of Poland's consumers.

The federation's active members, in order to facilitate communication with consumers, are setting up shop in clubs, at enterprises, in large department stores and in the editorial staffs of local newspapers. They have their own space in the newspapers and time on television. The work is being carried out not only according to complaints, but also based on sociological research.

In Poland, the judicial work against bungling workers is highly developed. There, the legislation regarding this matter is much more clear-cut than in our country.

The work of the All-Poland Federation is based on social principles. Professionals give their own conclusions free of charge. Only a small secretariat receives compensation. The assets come from various sources—small subsidies from the Ministry of Finance, the profit from the publication of a magazine and members' dues, which are not fixed—each person pays whatever he can. But anyone can turn to the federation, whether he is a member or not.

The consumers' movement has been strongly developed in China. There the national association has 703 organizations in the provinces and regions. In the PRC, in the State Council, there is an organ for evaluation of the regulations which touch on the protection of consumer rights.

Last year, 80 percent of the complaints and information from consumers were solved in a positive manner. The association, jointly with the state research centers, conducted tests on the quality of 3,000 food products, chemical products and medicines. More than 2,000 commercial products were subjected to testing by medical compounds and chemicals. In 25 cities, instances were studied of the faultiness of household appliances. The result of such action was the reimbursement of material loss to the owners of defective products and, in certain instances, its repair and replacement.

Activists Are Urgently Needed

In our country, the first step toward the organization of a Consumers' Union was the All-Union Buyers' Club, established with the participation of the AUCCTU, the weekly NEDELYA and the newspaper SOTSIALISTICHESKAYA INDUSTRIYA. For the time being, it is not necessary to talk about the experience of the club's work and only the first attempts have been made at protecting those who purchased poor quality items. The buyers won all 10 lawsuits. But it is not certain that the result would have been the same if the attention of the press and television had not been drawn to this—departmental instructions "smear" the effect of Articles 41 and 42 of the USSR's Basic Civil Legislation and the rights of consumers can be treated in a willy-nilly fashion. Particularly unclear is how it is to be if you do not get a seat in a taxi or are mistreated in a store or if a train is late.

And yet, by its own nature, the club is, all the same, not an independent organization. It lacks sufficient public support.

To me, the future union will be an independent public organization. Among its active members should be professionals for evaluating the quality of life, goods, the environment and so on, in order that the consumers'

rights be asserted before the state and economic organizations on a well-reasoned professional level. Thus, they should all operate on social principles.

Plans have been made for holding the founding convention for the Consumers' Union in 1989. Its success depends on the activism of the consumers and their desire to unite in order to assert their own dignity.

From the editorial staff: Active work is going on right now on the establishment of the Consumers' Union. But, unfortunately, not just the consumers themselves are evident in the abundance of founders. But then, there are many looking after the consumers' interests who may fully become an object of the union's criticism. Among those assisting are the AUCCTU, the Ministry of Trade and the State Committee for Standards, of whom the main demand should be made for the quality of goods, services in trade, rest, the distribution of wealth and so on. In particular, they participated in the drawing up of the draft resolution of the Provisional Statute Regarding a USSR Consumers' Union.

In order for the union to be viable, it needs complete independence. And in order to have this, it should be founded by the consumers themselves, conforming only with their own interests.

HOUSING, PERSONAL SERVICES

Growth in Paid Services at Enterprises Noted

Gosplan Official Reports
18270049 Moscow EKONOMICHESKAYA GAZETA in Russian No 51, Dec 88 p 11

[Article by V. Anikin, Deputy Chief of the Consolidated Section for Consumer Products, Light Industry, Services and Trade of USSR Gosplan: "The Plan and Stimuli: What Has Been Changed"; first two paragraphs are source introduction]

[Text] Economic motivation and planning for the development of consumer-paid services for the populace by enterprises for which this is not their main activity has its peculiarities. In their letters to the editor, readers are requesting a more detailed description of what these peculiarities are and what is new that the August 1988 USSR Council of Ministers Decree No 972, "Measures for Radical Restructuring of the Sphere of Consumer-Paid Services to the Public," introduced.

Deputy Chief of the Consolidated Section for Consumer Goods, Light Industry, Services and Trade of USSR Gosplan V. Anikin answers these questions.

Additional stimuli for developing consumer-paid services at enterprises where such services are not their main function were introduced back in 1985. In particular, Article 6 of USSR Council of Ministers Decree No 716 of 31 July 1985 specified that, beginning with 1986, the total increase over 1985 in profits that were obtained from the realization of such services by these enterprises remains completely at their disposal. However, this article now comes into contradiction with the principles of the USSR Law on the State Enterprise (or Association), which calls for a single procedure for all enterprises that have converted to full economic accountability and self-financing for distributing economically accountable income. So it was abolished for those enterprises and organizations that converted to full economic accountability and self-financing. For them, the USSR Minfin [Ministry of Finance] and USSR Goskomtrud [State Committee for Labor and Social Problems] directive, "The Procedure for Forming and Using Profit from the Implementation of Consumer-Paid Services for the Population That is Obtained by Enterprises and Organizations for Which the Extension of Consumer-Paid Services Is Not the Main Activity, and an Incentive for Workers Through This Profit," ((No 189, 20 November 1985) no longer applied.

Instead of the previously existing statutes on incentives for consumer-paid services that were adopted in the August 1988 USSR Council of Ministers Decree No 972, new and more effective statutes have been defined. Enterprises have now been granted the right not to include consumer-paid services in their basic activity and to dispose of the proceeds obtained from extending consumer-paid services at their own discretion. These proceeds are an additional source of funds for the needs of production, the social development of collectives, and wages. The procedure for using the proceeds for these purposes is determined by the supervisor of the enterprise, association or organization in accordance with the advice of the working collective.

The following new circumstance also is fundamental. Wages for carrying out work and services that are not included in the total output, labor and services incident to the basic activity of enterprises, associations and organizations should be set in excess of the wage fund and be formed in accordance with the standard, or, where the standard method is not used, above the work plan established for them.

As an experiment at the Norilsk combine has indicated, these terms impel laboring collectives to develop consumer-paid services more actively. The estimated overall volume of the services per resident of the Norilsk industrial area right now is twice the countrywide average.

The procedure for organizing the development of draft plans for developing consumer-paid services has now been changed considerably. It has been established that planning for their development at enterprises with other primary missions should be executed in close cooperation with the ispolkoms of local soviets. All enterprises are obligated to coordinate with them draft plans for the totals and the structure of services, and to transmit them to the higher organ only after this is done.

Only those USSR ministries and agencies specified by USSR Gosplan in a special listing send initial planning data—control figures—and state orders to enterprises. The 1989 plan singled out 55 such industrial, transport, construction, and other Union and Union-republic ministries and agencies. The list includes those ministries and agencies that independently provide enterprises subordinate to them with supply and equipment resources. These ministries and agencies themselves issue goals for the development of consumer-paid services to enterprises subject to them. The indicated ministries and department should present USSR Gosplan with consolidated plans for realizing consumer-paid services, broken down by region and coordinated with Union-republic councils of ministries and with the city and oblast ispolkoms of Moscow and Leningrad.

As for enterprises and organizations of all other ministries and agencies, Union-republic councils of ministers send the tasks for consumer-paid services to them through their administrative organs. They are provided with material resources through the Union-republic councils of ministers or USSR Gossnab's wholesale trade. As wholesale trade develops and the whole new economic mechanisms gains strength, it is proposed that the rights be transferred gradually to the local planning service.

An important role under the new concept of planning for consumer-paid services has been assigned to the state order. Let us recall that, in accordance with the Temporary Statute on the Procedure for Formulating State Orders for 1989 and 1990 (EG [EKONOMICHESKAYA GAZETA] No 31, 1988), their content is formed for the plan period only by USSR Gosplan, jointly with USSR Gossnab, taking into account the results of a review of the proposals of USSR ministries and agencies, Union-republic councils of ministers, and interindustry state associations. Ministries, agencies and interindustry state associations cannot expand the content of the state orders that have been confirmed by USSR Gosplan or increase their amount.

When establishing state orders for 1989 and 1990, the severity of the problem of balancing the public's rising monetary income with the amounts of consumer goods and the extension of services is considered. Therefore, enterprises of all branches of the national economy (except for the USSR Minlegprom [Ministry of Light Industry] system) are to establish state orders for the total amount of production of foodstuffs, and also for nonfoodstuff commodities, in retail prices and to extend consumer-paid services to the populace. The state order for 1989 includes all types of consumer-paid services, except those extended to the public for electric-power, gas, and water supply and for heating.

The state order established by USSR Gosplan, Union-republic councils of ministers, and USSR ministries and agencies define only the total amount of consumer-paid services in terms of cost. As for the development of specific types of services, these questions should be resolved locally by the ispolkoms of soviets of people's deputies and by enterprise labor collectives.

Changes have been introduced into the formation of the indicator, "amount of realization of consumer-paid services for the population." Thus, it was established that output intended for sale through the trade network is counted against the enterprises, associations and organizations in the total consumer goods volume. If the output is sold directly to the populace for cash payment through the enterprise's cashier's office, it is included in the amount of consumer-paid services. Such a decision should raise the motivation of enterprises to sell to the public excess material resources and production waste, as well as output that clients have refused.

The motivation of state enterprises to extend assistance to citizens who are engaged in giving service by way of individual work activity is strengthened. In reports about the fulfillment of state orders for realizing consumer-paid services, enterprises have now been authorized to include the amounts of services extended by these citizens if they use equipment, tools and material resources of said enterprises.

Statistics Presented

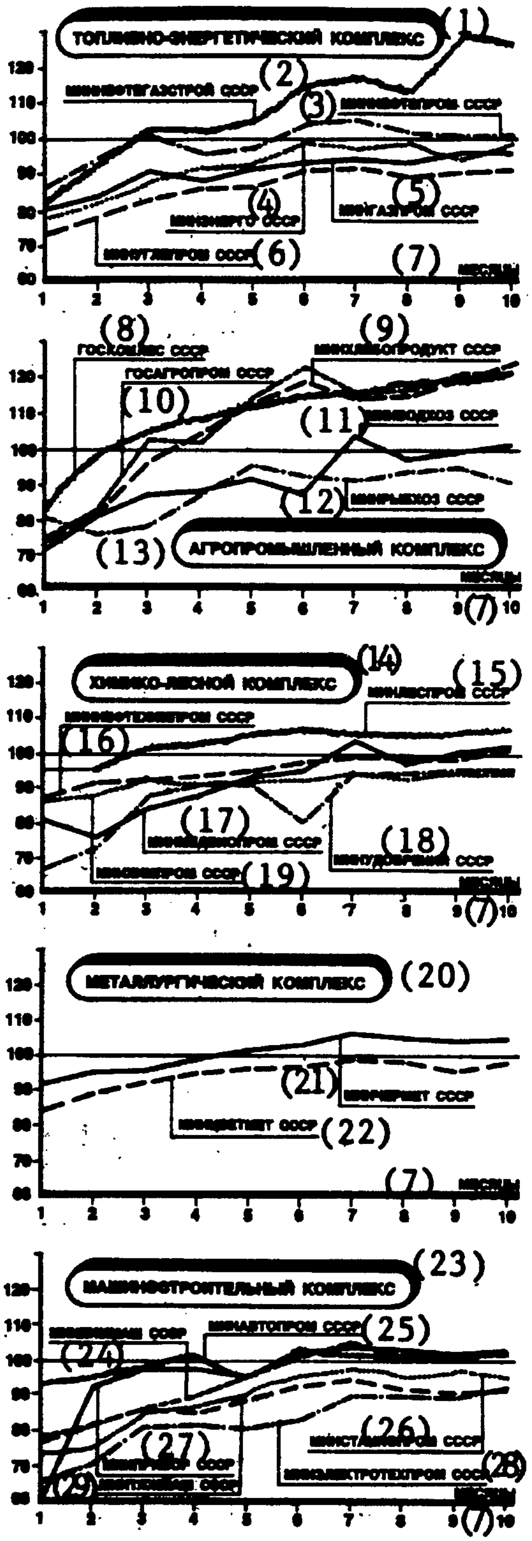
18270049 Moscow EKONOMICHESKAYA GAZETA in Russian No 51, Dec 88 p 11

[Article by Section for Economic Theory and Economic Training of Personnel: "The Market for Consumer-Paid Services"]

[Text] Sixty-five million rubles.... The figure in and of itself is impressive. But this impression is strengthened even more when you find out that it is precisely by this sum that the already scanty market of consumer-paid services has improverished us. And the guilty ones here are the enterprises of those ministries and agencies that spoiled fulfillment of the plan for consumer-paid services for the first 10 months of the year.

As is apparent from the charts, enterprises of such Union ministries as Mintyazhmash [Ministry of Heavy, Power, and Transport Machine Building] and Minrybkhoz [Ministry of the Fish Industry] (90 percent), Minugleprom [Ministry of the Coal Industry] and Minelektrotekhprom [Ministry of the Electrical Equipment Industry] (91 percent), Minkhimprom [Ministry of the Chemical Industry], Minudobreniy [Ministry of Mineral Fertilizer Production] and Minstankoprom [Ministry of the Machine Tool and Tool Building Industry] (95 percent), Mingazprom [Ministry of the Gas Industry] (96 percent), and Minenergo [Ministry of Power and Electrification] and Mintsvetmet [Ministry of Nonferrous Metallurgy] (99 percent) have chronically failed to fulfill the plan this year. As a whole, the fuel-and-power, machinebuilding and defense complexes failed to cope with fulfillment of the plan for the first 10 months of the year.

Results of Fulfilling Plans on Realizing Consumer-Paid Services to the Public During the First 10 Months of 1988 (in percent)



Key:
1. Fuel-and-power complex
2. USSR Ministry of Construction of Petroleum and Gas Industry Enterprises
3. USSR Ministry of Petroleum Industry
4. USSR Ministry of Power and Electrification
5. USSR Ministry of Gas Industry
6. USSR Ministry of Coal Industry
7. Months
8. USSR State Committee for Forestry
9. USSR Ministry of Grain Products
10. USSR State Agroindustrial Committee
11. USSR Ministry of Land Reclamation and Water Resources
12. USSR Ministry of Fish Industry
13. Agroindustrial Complex
14. Forestry and Chemicals Complex
15. USSR Ministry of the Timber Industry
16. USSR Ministry of Petroleum Refining and Petrochemical Industry
17. USSR Ministry of Medical and Microbiologicals Industry
18. USSR Ministry of Mineral Fertilizer Production
19. USSR Ministry of Chemical Industry
20. Metallurgical Complex
21. Ministry of Ferrous Metallurgy
22. USSR Ministry of Nonferrous Metallurgy
23. Machinebuilding complex
24. USSR Ministry of Chemical and Petroleum Machine Building
25. USSR Ministry of Automotive Industry
26. USSR Ministry of Machine Tool and Tool Building
27. USSR Ministry of Instrument Making, Automation Equipment and Control Systems
28. USSR Ministry of Electrical Equipment Industry
29. Ministry of Heavy, Power and Transport Machine Building

And the matter is not only that the public's effective demand is not being satisfied and is growing, but that there is such a great imbalance of monetary income with the volume of goods and services proposed.

Failure to meet plan tasks does not enable the existing potential for making our lives convenient and for easing everyday existence. And it happens that the workers themselves of enterprises often complain, as ordinary consumers, about the absence of a diverse market for services. And at a time when producers are doing hardly anything to increase and diversify their offering and thereby to improve their own living conditions.

And how are matters going with the demand for services of the plant's services organization? Here the data of USSR Goskomstat [State Committee for Statistics], which conducted a one-time selective inquiry of 46,000 blue-collar and white-collar workers, indicate that, in studying their opinion about services at the place of work, of those asked 53 percent considered it necessary

to organize or improve the work of the plant's centers for ordering foodstuffs, 48 percent—on-site trade in non-foodstuff commodities, and 35 percent—public eating. Moreover, of those questioned, 18 percent were not satisfied with the work of plant transport, 29 percent the medical service, and 36 percent the barbering service. And indeed the organization of such services, you will agree, are not so complicated. All that is needed is the desire.

One is forced to mull over such data. Because of the absence at the enterprise of various types of domestic services, 60 percent of those blue-collar and white-collar workers questioned did not turn to the plant-service organization. And 41 percent noted that they did not receive physical culture and athletic services, and 37 percent did not receive travel and excursion service. Such a substantial amount of unsatisfied demand scarcely promotes a good frame of mind of the people, either at work or elsewhere.

Of course the problem of unsatisfied demand cannot be solved by a quantitative accumulation of services of low quality. Unfortunately, that occurs frequently. The results of this same survey, for example, indicate that the quality of the services extended at the place of work does not satisfy practically one half of those questioned. Thus, 73 percent express serious, substantiated complaints about the quality of services of plant dining halls and buffets, 71 percent—of stores, 47 percent—of plant medical service centers, and 48 percent—of recreation centers.

Usually both enterprise and ministry supervisors justify the deficiencies and poor quality of services by their unprofitability. Actually, out of 49 Union-wide ministries and agencies which have established goals for realization of consumer-paid services, 23 are doing so with losses. Therefore enterprises often cite losses of economic-accountability income, and they unwillingly agree to the development of plant services that are so necessary for their own workers.

But indeed the losses take shape not because, as is usually said, enterprises whose primary mission is something else have been occupied with consumer-paid services, but primarily because of poor organization, a formalistic approach that is lacking in initiative toward the matter, and a lack of skill in finding and training qualified personnel. Also relevant here is slowness in organizing new forms of work, rents, cooperatives and contracts in the subdivisions of the plant's services organization.

Speaking incidentally, at those enterprises where sections for social development and an office for extending consumer-paid services are being created, where close cooperation with local soviets and other enterprises and cooperatives is being arranged, no little profit comes to the plant cashier's office. And, in general, initiative and a consideration of local conditions are important. For example, at USSR Minpribor [Ministry of Instrument Making, Automation Equipment and Control Systems] enterprises, where work on extending consumer-paid services alone is being speeded up, during the first nine months 455,000 rubles of profit were obtained, and in USSR Minmontazhspetsstroy [Ministry of Installation and Special Construction Work] the figure was 1.17 million rubles.

In brief, consumer-paid services are advantageous in both an economic and social regard. For each enterprise and each worker, it should be full-fledged, high in quality, a day-in and day-out matter, and a commodity accessible in price.

Sale of State Apartments to Private Tenants Planned

18270033a Moscow IZVESTIYA in Russian 9 Dec 88 p 3

[Interview by IZVESTIYA correspondent R. Ignatyev with Yevgeniy Grigoryevich Rozanov, first deputy chairman of USSR Gosstroy and chairman of the State Committee for Architecture and Town Planning, under the rubric "From Authoritative Sources": "The Apartment Will Become Private Property"; first paragraph is IZVESTIYA introduction. Passages in boldface as published]

[Text] **As has already been reported, the CPSU Central Committee's Politburo has approved the USSR Council of Ministers' decision regarding the sale of apartments in state and public housing buildings and their conversion into citizens' private property. This will take effect as of 1989. In connection with this, IZVESTIYA asked Ye. Rozanov, first deputy chairman of USSR Gosstroy and chairman of the State Committee for Architecture and Town Planning, to respond to its correspondent's questions.**

[Ignatyev] **Yevgeniy Grigoryevich, this is the first time the government has made such a decision. You must admit that it is not exactly commonplace for our society. In point of fact, housing includes commodity-money relationships. The acquired apartment becomes the buyer's private property. Does this not seem to be a forced measure?**

[Rozanov] The emergence of this document is associated with the solution of the country's housing problem. This matter, as you know, is very acute. We have publicly declared that, by the year 2000, every Soviet family should be provided with a separate apartment or individual house. The task is one of utmost complexity. Judge for yourself: according to the specialists' calculations, over the remaining 11 years, we will have to build half as much housing as is already available in the Soviet Union today (!).

[Ignatyev] **What would that be in specific figures?**

[Rozanov] Presently, the total available housing amounts to 4.3 billion square meters. And, in order to fulfill the promise, we need another 2.8 billion square meters. This number, of course, is gigantic. But, taken into account here are the deterioration of buildings, the population growth and a lot of other factors.

[Ignatyev] **And have the builders' capabilities been taken into consideration? Are they up to such a burden? Indeed, in years gone by, quite a few bold statements have been made, but, in the end, a lot remained only on paper.**

[Rozanov] We are reassured by the fact that, recently, the housing start rate has been increasing annually. For example, in 1988, according to the plan, it has been projected that 129 million square meters will be built, while we expect that 134 million will be. We are hoping to reach the 150-million mark in 1990 and, thus, over the course of the 12th 5-Year Plan, to let 630-650 million square meters of housing and, over the next 5 years, to manage to reach a billion. Yet, nevertheless, even this will be inadequate. In order to solve the housing problem, we should have a per capita construction rate of one square meter per year. Just like in all the developed countries of the world. In our country, this index is less than half that rate. In other words, it is impossible to count on the builders alone. And the resources needed are enormous.

[Ignatyev] **It turns out, then, that the sale of apartments to the populace is a way out of the existing situation?**

[Rozanov] To a certain degree, yes, since this expands the opportunities for the citizens to participate on a voluntary basis in housing construction financing. Up till now, in our country, this has been done basically through centralized state capital investments. And yet, at one time, for example, in the post-war period, this was accomplished using citizens' assets and amounted to 50 percent. The residents themselves built their own homes, both in the countryside and in the city. Then the construction of such housing was gradually cut back and amounted to just 20 percent. And, in recent times, in connection with the exodus of the populace from villages, as well as because of the various types of restrictions and the shortage of construction materials in the commercial network, individual construction was cut back even more.

[Ignatyev] **Did this somehow affect the housing problem?**

[Rozanov] Of course. The ranks of those needing housing swelled immediately and construction expenses increased. This is why, beginning in 1988, the CPSU Central Committee and the USSR Council of Ministers adopted a decree on the development of individual and cooperative housing construction. First, all groundless limitations on sizes and number of stories for housing built by the populace have been removed and advantageous credit conditions have been established. Enterprises, associations, organizations and local soviets of people's deputies have been empowered to render material assistance to individual homebuilders and to handle matters of construction materials. The number of HCC's [Housing Construction Cooperative] has increased and there have even appeared housing cooperatives for obtaining from the state new houses or ones that have undergone capital repairs. In general, these are those resources which will help in solving the housing problem in our country. And then there is the decision of the USSR Council of Ministers regarding the sale of apartments to the populace. It, as it were, has become a continuation of previously adopted documents and is a component part of them. Thus, a set of measures has been established on the use of not only state resources, but also private resources of the citizenry in order to provide each family with an individual apartment or house.

[Ignatyev] **Yevgeniy Grigoryevich, we would like to find out more details about the new document. Who, for example, has the right to purchase an apartment?**

[Rozanov] Whoever is occupying it at the present time. It is also possible to sell living space in unoccupied houses under construction or repair. But a priority right to acquire such apartments has been granted to citizens who are on the list for improvement of housing conditions. Such a procedure will not infringe the interests of those waiting for housing and will not give an advantage to people who have significant monetary assets and, thus, the observance of social justice will also be ensured. Moreover, it has been stated in the decree that only one apartment or individual home will be allotted to a single family. This mandatory condition prevents all kinds of abuse: the use of housing as a source of unearned income and the like.

[Ignatyev] **How will it be possible to purchase an apartment?**

[Rozanov] A person desiring to acquire an apartment applies to the organization to which the living space belongs. This can be an enterprise, an association or the executive committee of the local soviets of people's deputies. They evaluate the apartment and, after this, the tenants make the initial payment. It should amount to no less than 50 percent of the indicated amount. The customer is given the opportunity of paying off the remaining debt over the course of 10 years. By the way, families with a lot of children and few assets are given certain advantages: in particular, the payoff period for them can be extended for a period of up to 15 years. The initial payment amount is reduced to 30 percent. As soon as a citizen acquires an aparment, it becomes his private property. He can do what he wants with it: sell it, give it away, will it to someone...

[Ignatyev] **And are there any kinds of limitations here? For example, can a Moscovite sell his apartment to a person whose residential registration is in another city?**

[Rozanov] Such questions are being decided on an individual basis in each instance, according to an established procedure. The local soviets are being granted broad powers in the determination of the procedure for selling living space and in the establishment of rules for maintenance and the payment of expenses for the upkeep and repair of buildings with apartments owned by citizens as private property. The councils of ministers of the union republics, together with the trade union organs, should maintain a corresponding position themselves. It is recommended that local authorities assist in the formation of unique associations which would join together the apartment owners. This will help in efficiently operating buildings based on collective self-management and mutual assistance. The decree provides for the introduction of an Ukase on Amending the Basic Housing Legislation, inasmuch as a new concept is being introduced—the apartment as the private property of citizens.

[Ignatyev] **Approximately how much will a one-room apartment cost?**

[Rozanov] This depends on its condition, accommodations, story level and even the region in which it is located... But, if you want to cite an average, then, now in our country, one square meter costs 200-250 rubles. Hence, a one-room apartment with a total area of 25 square meters would cost a customer around 5,000 rubles. After a citizen has acquired an apartment, he pays only for utilities: light, hot water...

[Ignatyev] **Where will the profits go?"**

[Rozanov] The funds received from the sale of apartments in buildings constructed through centralized capital investments will be transferred to the local budget. They should be used for the development of social services. Whereas, if the living space belongs to a department, the received funds remain at its disposal and are targeted for housing, community construction and repair and renovation of residential buildings.

[Ignatyev] **When the decree goes into effect, will it be possible to guarantee acceleration in the solution of the housing problem?**

[Rozanov] With the conversion of apartments into the private property of citizens, there will undoubtedly be an improvement in the maintenance of available housing and there will be no need for state expenditures for the repair and maintenance of such apartments. But, in our opinion, there are more additional resources. The fact is that there has still not been a survey in our country of available housing. The data we have today can not be considered to be reliable. There are reports that a large number of apartments are empty in a number of large cities and regions. A lot of people have an excessive amount of living space. It is true that there are no corresponding rules in the USSR, only sanitary standards: nine square meters of living space per person. Yet, nevertheless, there should be some kinds of limits. It is obvious that one more decree is needed here. Social justice should exist in this matter as well. A decision has already been adopted that, during the new census, which will begin in January of 1989, the housing conditions will also be taken into account for the first time. This will help us determine the actual situation with respect to available housing and, thus, its more rational use.

ENERGY COMPLEX ORGANIZATION

Kiev Conference Considers USSR Power Development

18110014a Kiev LITERATURNA UKRAYINA in Ukrainian 10 Nov 88 p 3

[Article by Viktor Hrabovskyy: "What Is the Most Precious Thing in the World?: Reflections Following the All-Union Conference on Principal Directions and Problems of Future Development of the USSR Power Industry, Held Recently in Kiev"]

[Text]

Professionals and "Amateurs"

At the conference summation session somebody in the audience asked the head of the section on water management and ecological problems, former Ukrainian SSR minister of power and electrification and presently USSR Academy of Sciences Corresponding Member P. Neporozhniy, how it was that he was heading up that section, never in his life having dealt with problems of environmental protection. The ex-minister replied: "And how would it be if ecologists were to handle problems of power and energy supply? The fact is that ecology's assault on the power industry will lead to no good!" This set the hall astir, and P. Neporozhniy added in a confidential tone: "I was told in the Central Committee: 'You have made a mess of things for the last 17 years; now you fix it!'" He made a helpless gesture with his hands. "Of course I am joking...."

"A bitter joke!" the audience responded.

The ex-minister again made a gesture of helplessness....

Such a staid event as an All-Union Conference on Problems of Power Engineering was unquestionably livened up by participation by the informal Hromada, Spadshchyna, and Zelenyy Svit organizations, oblast Ekologiya societies, etc. A certain accent at the conference was produced by speeches made by S. Plachynda and Yu. Shcherbak, leaders of public and writers' ecological associations, the expanded texts of which we must make available to our general readership. Incidentally, in the water management and ecological problems section alone, highly interesting reports were presented by prominent Ukrainian scientists V. Shestopalov, Ye. Yakovlev (engineering-geological problems of locating power industry facilities), I. Vyshnevskyy, and V. Chumak (ecological problems of location and operation of nuclear power plants in the Ukrainian SSR). The influence of power industry installations on the hydroecological situation in this republic was discussed by V. Romanenko, rector of the Ukrainian SSR Academy of Sciences Institute of Hydrobiology, while I. Dibobes (Gosgidromet) discussed the ecological requirements on determining the location of nuclear power plants. Yu. Sinyak, E. Volkov, and other Moscow scientists presented a paper on the influence of the power industry on climate in various regions of the USSR.

Very regrettably, however, at the development of electric and thermal power sections not only were ecological problems not addressed, but even forgotten and fundamentally new kinds of energy, although of course they were occasionally mentioned in the debates. Thus even this supposedly prestigious event revealed a lack of coordination pertaining to the future of this industry, for if we continue management in the same manner, patching the consequences of accidents and breakdowns as we go, in 20 years the biosphere will be totally inhospitable to human life and to all living things. Today nobody any longer denies the reality of this scenario. In addition, all countries are engaged in the persistent search for and development of new ways, new kinds of energy and energy-producing fuels for future development of the power industry. Muscovites, for example, have seen at an exhibit the achievements of Italian engineering innovation with an installation which demonstrates the properties of superconductivity.... In Japan—once again Japan!—they have even built the world's first generator which produces current by means of superconductivity. Although it is of modest output, this achievement attests to the fundamental possibility of developing motors employing this principle. How can this help but excite the interest of our scientists and power engineers? Can it be that the claim that nuclear power is the ecologically most expedient of all existing energy technologies will remain our greatest ecological achievement? But why not hydrogen? A closed hydrogen cycle which uses hydrogen obtained from water. (The waste product of such an energy technology is pure water vapor!) And although even today mastery of this technology is beyond the capabilities of the state, this by no means signifies that it should be rejected. On the contrary! Precisely cooperative effort with other countries in this field of technology for the sake of the survival of civilization should become a genuine manifestation of the new political thinking. Solution of the problem of so-called nontraditional renewable energy sources must be elevated to the level of such prestigious programs as nuclear power engineering or man's conquest of near space became in past years. Otherwise the sum total of ecological problems will wipe out our most noble intentions regarding the future. Once and for all.

It is true that during the above-mentioned debates and in the conference corridors there was considerable talk about "good forgotten" kinds of free energy and modern utilization of the tides, the sun, hot springs, etc. We might recall that at one time considerable talent was devoted to these by S. Korolev, Yu. Kondratyuk, and others, seeking to meet society's needs for cheap energy. Who knows how things would have evolved if the "father of peoples" had taken an interest in wind-powered generators. Also, as long as the Ministry of Power and Electrification, ignoring the efforts of devotees, fails to specify future development of this industry taking into

account all existing areas of energy technology, there can be no positive movement toward solving ecological problems.

Reading an appeal by the Cherkassy Ecology Society to the conference participants, society chairman Yu. Visochin stressed: "By ill-conceived increasing of the burden of man and technology on nature, which is destroying its regenerative powers, we have forced ourselves into the labyrinth of a harsh ecological crisis. Under these conditions it is now too late to 'protect' the natural environment in Cherkassy Oblast. It must be rescued—both Kanevskiy Rayon and Chigirin. This is why the public is so concerned by construction of the Chigirin Nuclear Power Plant, which incidentally is being done contrary to the Requirements on Location of Nuclear Power Plants and the recommendations of MAGATE...."

The "amateurs" did not pass up a single opportunity, citing world-renowned authorities, to create at least doubt in the hearts and calculations of the professionals.... At least the latter listened to what they had to say.

Who Will Dispel the Myth?

At first glance nuclear power would seem to have many advantages over traditional energy sources by virtue of its effect on the natural environment—it does not consume oxygen from the air, and it does not produce emissions of oxides of nitrogen and sulfur or toxic substances. But the greatest ecological danger from using the atom lies in radioactive contamination of the environment. Almost half a century of experience in operating various nuclear reactors in a great many countries attests to the fact that mishaps occur from time to time.... We have recently heard about an accident at the Beloyarskaya Nuclear Power Plant.... In the accident which took place at a nuclear power plant in Pennsylvania in 1978, more than 10 million Ki of radioactive matter was released into the atmosphere, according to official figures, which irradiated several thousand persons. Almost 200,000 persons were evacuated from a densely-populated zone in a radius of 40 kilometers from the accident site. The U.S. nuclear power industry has been receiving pressure since that time—scientists, doctors, and the general public have been coming out in increasingly resolute opposition against this "cheapest" source of energy.

The Chernobyl tragedy gave a serious warning to the entire world. Only France and the FRG are not curtailing the construction of nuclear power plants which, the fact is, are considerably more expensive in those countries than in this country. (According to available figures).

What is the point? Are we ignoring common sense for the sake of program-planned "apparent benefit" merely because "we have plenty of land?" But quantity does not mean benefit. The students, writers, scientists, doctors, teachers, and engineers who set the tone today in the activities of the ecological associations, who have written articles in LITERATURNA UKRAYINA reviewing the program of development of nuclear energy in the Ukraine, are economically knowledgeable people. In addition, they are convinced that the economy must also be ecologically sound. There is no other conceivable position. And when our professionals respond even to mild comments by Doctor Hale with charges that he is not competent in these matters, the world community unquestionably takes this as a demand that one not meddle... in the affairs of government.

But even if the world had not today been faced with the incredibly acute problem of disposal of radioactive and toxic chemical waste, a problem not only of technical but of great social gravity as well, it would have to search for alternatives. In the opinion of international experts who have studied the consequences of accidents at nuclear power plants, it is impossible to build a totally reliable nuclear power plant, where the possibility of an accident would be reduced to zero. Every nuclear power station is an aggregate of subsystems, each of which has its own level of reliability. It is necessary to change the very technology in designing new types of reactors, if not to give up reactors altogether.

Today we are familiar with a great many ideas for designing a reactor which would depend entirely on the laws of physics, not on the design and construction of the safety system and discipline on the part of the operator personnel. The Swedish Atom firm, for example, proposes a "totally safe" reactor which consists of a core and primary cooling system, like a conventional reactor, but all this is immersed in another containment vessel and is cooled with water.... But the experts warn us that the majority of new concepts are premature and that the new designs, following more detailed analysis, will prove to be even less reliable than existing reactor designs.

There is no doubt that our science will surmount all obstacles in the path of designing and building an accident-programmed reactor of the greatest power generating capacity.... But why not also pay heed to those who are of the opinion that the splitting of the atom signifies a step toward the perishing of civilization? Recently prominent science fiction writer V. Savchenko published in "Review of Books" interesting comments pertaining to the half-life of radioactive substances, which keeps increasing....

(Two applications for a certificate of discovery of a "phenomenon of variability of rate of radioactive decay of nuclides" and of the "phenomenon of increase in radioactive decay" have been submitted to the State Committee for Inventions and Discoveries). The writer quotes the following passage from "Guide to Isotope Geochemistry": "At the present time the average concentration of radon in the air in large cities is 2.10 to the minus 12th power curies per liter, which is approximately 10 times the concentration recorded 50 years ago at a number of locations in various countries. This phenomenon is rather difficult to explain." But this is

precisely the period of time during which we have been exploiting the "peaceful atom," is it not? And unexplained accidents at nuclear power plants will be occurring with increasing frequency, for the rate of processes of radioactive decay today are not those rates witnessed by Rutherford and Curie.

M. Tariverdiyev, who composed the organ symphony "Chernobyl," while not claiming the attention of the professionals, once noted that great civilizations have always destroyed themselves from within—either in the desire for boundless expansion or in the infernal greed to "possess" more and more.... History sets out warning signs.... And the sarcophagus of Chernobyl is merely a link in the iron chain of perished civilizations, a first warning on the threshold of the wasteland which man himself is ever creating.

Are the people at the Ministry of Atomic Power and their supporters aware of "their" program?

As V. Gubarev attests ("The Good Fortune and Tragedy of Academician Legasov," PRAVDA, No 291), at the Seventh World Conference on Hydrogen Power the memory of this scientist was honored by a moment of silence. In Kiev his name was not even mentioned....

Everything in the Name of the People....

Fortunately (?) today we are asking one another with increasing frequency whether the reason today's world is so deaf to common sense is not because we have become excessively focused on the specific peculiarities of the concept of good and evil, beauty and purpose, and because the ideas of the "scientific and technological revolution" have become separated from the aesthetic traditions of the people and have neglected the laws of humanitarianism. Did Vernadskiy, in defending his concept of the noosphere, argue the inseparability of science and culture, knowledge and morality in vain? "The development of scientific thought never remains deduction or induction long," the scientist asserted. "It must have its roots in another domain, filled with poetry and fantasy: either the domain of life, the domain of art, or the domain of philosophy."

Why is it that every day we encounter militant professional nihilism—by nuclear engineers, land development and reclamation specialists, and in general the majority of technocrats who, lulled by successes of the past, do not give a hoot for the voice of the public? Is it only because they have taken too literally that folk saying: the most precious thing in the world is sleep? But sleep of the spirit engenders the monsters of spiritlessness. Scientists! Let us not forget this fact!

I would guess that participation by nonprofessional organizations in the conference proceedings helped many power engineers and power industry people take a different look at their role in society and grasp the meaning of pluralism in action rather than in words. Finally, perhaps the new concept of energy conservation officially articulated by USSR Academy of Sciences Corresponding Member A. Makarov at the final session is more than mere words. That is, henceforth will a significant role be assigned to ecology within the triad of ecology, social interests, and economics? Does this mean that Zelenyy Svit [Green World] and the ecological associations of various oblasts of the Ukraine did not go to work in vain? And is this mass movement to humanize society producing its first fruits?

Let us not be too hasty about rejoicing. The mechanism of forming of acid rain has not yet been fully investigated, and yet the forests of the Carpathians and the Polesye are dying precisely from acid rain.... The struggle against air pollution is a component part of the national environmental protection programs of all industrially developed countries, but even if in the course of the next 10 years the British Ministry of Energy allocates, for example, 170 million pounds for renovation of 12 coal-burning heat and electric power plants, for the country as a whole the total amount of emissions of oxides of nitrogen (these appear to be the principal components of acid rain) will decrease by only 10 percent, which is patently inadequate.... Last year air samples taken in Dublin indicated that smog exceeded international standards at six out of 11 locations. And in the case of photochemical smog, oxides of nitrogen and carbon, under the effect of solar radiation, promote the formation of large quantities of ozone in the lower atmosphere, which is very harmful both to humans (pneumonia, asthma) and to agricultural crops (it inhibits their growth). Decisive, fundamental measures to save both ourselves and nature are needed.

Exactly what is being done? What plans does the Ministry of Power and Electrification have as regards cleaning up industry and the environment? If thermal electric power plants are more radioactive than nuclear power stations, as the nuclear industry people claim, when will the public be provided with portable dosimeters? These and other questions were raised at the press conference.

New figures made public last year in a study entitled "U.S.-Japanese Reevaluation of Radiation Readings at the Time of the Atomic Bombing of Hiroshima and Nagasaki, Final Report" indicate that the percentage share of neutron radiation was overstated in previous estimates approximately by a factor of 10, while the percentage share of gamma radiation was understated by a factor of 2-3.5. Thus it turns out that the victims of these bombings (those who survived) in fact received smaller doses. And it follows from this that the risk of oncological affections from small doses is several times greater than previously believed. (Immediately following publication of this study, more than a dozen scientists sent a petition to the International Commission for Radiological Protection in which they recommended reducing the allowable exposure dose for nuclear industry workers... by a factor of five. This matter has not yet

been settled in the United States). I asked the scientists what they thought about this. It was apparent that the scientists knew nothing about it. They had not read anything about it.... And they are supposed to be professionals? But Ye. Ignatenko, chief of the Main Scientific-Technical and Design Administration of the USSR Ministry of Atomic Power, self-assured as always, replied that everything in this country is under control, although millions of TV viewers have heard repeatedly, particularly from Hero of Socialist Labor M. Samoylenko, that monitoring devices at nuclear power stations are of inadequate quality and sophistication.

But why even make a point of information published abroad when the Ministry of Atomic Power does not even consider it necessary to purchase suitable sets of special gear for firefighting personnel at nuclear power stations, which was mentioned even in PRAVDA? After all this, who is going to believe that the ministry is interested in our safety when in fact it fails to guarantee the safety of nuclear power station personnel?

USSR Academy of Sciences Corresponding Member I. Makarov, as he convened the final session, reported that more than 130 proposals made during the conference will be considered and sent to the ministries and agencies.... A decision will be made public after due deliberation. What about a plebiscite? Only a nationwide public discussion of the new directions of development of the power industry will determine how we should proceed.

Let us hope that words will not once again fail to be transformed into actions.... It is interesting to note that for the first time (!) a decision prepared in advance was not accepted.... And the public played a substantial role in this (in particular, the Kiev Scientific and Technical Society of Power Engineers).... Unquestionably Academician A. Aleksandrov and other scientists heard some unpleasant things at this conference, but if everything that is being done is for the benefit of the people, then the "competence-lacking" people should be listened to at least occasionally. Particularly since today we officially declare: public opinion has the same legal rights as ministerial conviction, for the very existence of mankind is at stake! It is for good reason that I. Prigozhin, Nobel Prize recipient in physics, notes in his book "Poryadok iz khaosa" [Order out of Chaos]: "We are living in a dangerous and uncertain world, which inspires us not with a feeling of blind assurance but only that feeling of moderate hope which Genesis ascribes to God: Twenty-six attempts preceded the creation of the world, and they all ended in failure. The world of man arose from the chaos of broken fragments remaining from previous attempts. It is too fragile and runs the risk of once again becoming naught...."

We should not allow to pass by that chance which will give us the right to remain mankind!

FUELS

Tengiz Field Exploitation Progress Noted

18220023a Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 16 Dec 88 p 2

[Article by SOTSIALISTICHESKAYA INDUSTRIYA correspondent I. Mordvintsev, Guryev Oblast: "Tons, Rubles, and Good Intentions"]

[Text] **Only a few days remain until the starting up of the first technological line at the Tengiz Deposit. That line will make it possible to produce 3 million tons of petroleum annually. The total first phase—which it is planned to assimilate in the current five-year plan—will consist of four such lines. Ten whole years have been spent basically in a search for the necessary technology and technological schemes. But, as the expression goes, there would not be any happiness, but the misfortune did help. Thanks to the postponement, it has proven to be possible to resolve the questions of creating the social and personal-services infrastructure better than has ever been done anywhere when assimilating petroleum-producing regions.**

S. Toplov, deputy minister of the petroleum industry, pointed out for me, not without pride, the watch settlement of Tengiz, where there is nothing that recalled the miserable temporary housing of the Tyumen trailblazers. Multi-story apartment buildings with interesting architectural features, containing apartments with modern planning. Immense, well-lighted dining halls, sports stadium, a sauna—all of these things, and many others, are very impressive. For the first time a settlement is being created not as a sum total of departmental "farmsteads," but as a single organism.

However, everything is not yet going as has been planned. One might recall that a year ago, at a large conference in Kulsary, N. Makiyevskiy, KaSSR minister of construction (currently he is chairman of the republic's Gosstroy), promised to put into operation in Embinskiy Rayon no less than 170,000 square meters of housing. But Nikolay Mikhaylovich did not carry out his good intentions. Approximately 20 percent of the housing will not be turned over, including 8000 square meters in the watch settlement. The construction of stores and a club is being dragged out. And without all of this, how is it possible in the desert to knock together a collective of operations personnel?

Unfortunately, we have not yet grown to the point of taking the approach that was demonstrated to us very graphically by our Hungarian comrades who are employed at the same complex in the erecting of technological projects.

Before beginning to do the job, they provided themselves with everything that they need to feel as comfortable in this desert land as they did in Budapest: from their own bread bakery to a telephone exchange. Not to mention housing with the mandatory air conditioning. But as for

us, even though we did take a step forward, we nevertheless have put the cart before the horse. But here this is something especially risky. Converting such a dangerous production entity into a pass-through courtyard (and that is what can be counted on under the conditions of this kind of climate and personnel shortage) is tantamount to dancing on a powder keg with a resin-soaked torch.

Well, the readers will probably say that the correspondent began this article in a complimentary tone, and now, all of a sudden... Excuse me, but I have not done this "all of a sudden." Recently B. Shcherbina, deputy chairman of USSR Council of Ministers, visited the Tengiz complex. This is the way he defined the purpose of his trip: "The search for additional reserves to expedite the work rates and the determination of the possible changes in the previously planned scope of assimilation of the region, in the direction of increasing it." As translated into everyday language, this means just what it used to mean: "give us tons, give them to us more quickly."

The situation is not changed by Boris Yevdokimovich's stipulation to the effect that one cannot—as he states it—irresponsibly include in the category of second-priority projects the projects intended for social, cultural, and personal purposes or for environmental purposes. I myself recall how many of statements like this used to accompany any of the new construction projects known to me—and, it would seem, they had one and the same effect. And that is how things will be until the social, cultural, personal-services structures and the environmental-protection facilities are built not after, and not even on a par with, but before the structures intended for basic production.

If one is to believe the forecast made by Academician A. Aganbegyan, by the end of this century the population in the region around the Caspian will grow to 1.5 million persons, and the overwhelming part of that increase will occur in Guryev Oblast and its desert rayons. If we assume that the cost of providing the social services for one person is 10,000 rubles, we obtain a stupendous figure. Is it possible to resolve this task "in passing," hoping that the administrators at various levels will not be tempted to hold it back somewhat for the sake of being able to report ahead of time that there has been a buildup in the long-awaited tons?

Let us finally—not for the sake of saying pretty words, but in a truly genuine way—answer the question: are the social, cultural, and personal-services structures needed for the tons, or is it the other way around—we need the tons so that we can live better? Unfortunately, for the time being, the choice is not being made in our favor. We squeeze out a bit more petroleum, we sell it abroad, we use the proceeds to buy drilling rigs and the most ordinary oil-field equipment (from a discussion with A. Maksimov, chief engineer of the Tengizneftegaz PO [Production Association], I understand that the hopes that any domestic equipment for the fourth technological line will appear are practically equal to zero), and for what purpose? That's right: to pump out more tons, in order to sell them... And so on.

Somehow we cannot see any attempts to ponder a bit about the creation, even in the petroleum-gas industry, of those economic formations that would drill, extract, and sell their own output, on the basis of complete cost accountability. So that, from the very first glance, it would become obvious how much is flowing in through the various pipes, and how much is flowing out, and to where. So that this single manager cannot only receive profit, but also be responsible for everything. But what is happening today? There is a tremendous number of managers, but when it comes to bosses, there is no one!

Yu. Vikulov, who was recently assigned to the position of first deputy chairman of the oblast committee for environmental protection, and who is the former secretary of the Guryev Oblast Committee of the Communist Party of Kazakhstan, was inclined as recently as yesterday to stop temporarily the drilling of operational wells at the Tengiz Deposit. Because, among other things, there has been no resolution of the problem of burying the rocks that were brought up by drilling, which contain many products that are undesirable for inhabitants of the sea.

Why are sea wells located on the shore? Because the shore of the Caspian Sea in these places is low, and during storms the waters of the sea frequently flood the surrounding areas for tens of kilometers. It is no accident that the watch settlement here has been built by piling up the dirt to a height of two or three meters.

"There is a forecast," Yu. Vikulov says, "that the level of the Caspian will rise steadily for an additional 15 years, as a minimum. It is not precluded that the shore line will taken on its previous outlines, when Tengiz was located under the water. But we are not ready for that. There is no plan that is satisfactory to any extent for building protective dikes, and there is absolutely no idea even of where to put them. The oil workers, at their own risk, are putting embankments all around the oil fields, using the friable local soil. However, this protection is extremely unreliable, as was shown by the events of last year, when, during a storm, it was only with difficulty that the territory where the GPZ [Groznyy Petroleum Refinery] that is under construction could be defended from the onslaught of the sea."

"His Majesty" the ton flouts common sense for many other reasons. Take, for example, such a "childish" question as: where will we put the output from the complex that we currently are rushing to activate? It is proposed that the petroleum be fed, by way of a pipeline, to the Groznyy Petroleum Refinery. But by the time that the first line at Tengiz is activated, that pipeline will

have been brought only as far as Guryev. Should the petroleum be offered to the Guryev refinery? That would require fundamental remodeling, which no one is even thinking of beginning.

"It's a small problem," the optimistic oil workers say. "We'll pump it into the Mangyshlak-Kuybyshev pipeline, and that's all there is to it."

"It really will be a problem," the petroleum refiners object. "Tengiz petroleum, which contains aggressive substances, will turn the pipeline into a sieve in an instant..."

The argument on this speculative level is continuing. Whether we want it or not, doubt is creeping in: is it possible that we have, in addition to ministerial opinions, a state opinion also?

ELECTRIC POWER GENERATION

New Nuclear Power Safety Group Formed

18220038a Kiev RABOCHAYA GAZETA in Russian 6 Dec 88 p 3

[Article: "AES: Testing the Safety"]

[Text] Today a MAGATE [International Atomic Energy Agency of the UNO] group to discuss problems of operational safety (OSART), started work at the Rovenskaya AES. Its complement included staff specialists of IAEA, as well as experts from the GDR, Spain, Canada, the USSR, the United States, Finland, France, the FRG, the ChSSR, the Socialist Federated Republic of Yugoslavia and Japan. Representatives of the People's Republic of Bulgaria and the People's Republic of China attended as observers.

In accordance with the program, the group at the Rovenskaya AES is studying, specifically, the operating indicators of the plant and problems of personnel training and administration organization, and is checking the correctness of the approaches proposed for use here to prevent and eliminate anomalous phenomena, including accidents. As the result of this, it will become possible to compare the qualitative level of measures to ensure safety at the Rovenskaya AES with positive world experience, and also to correlate with the safety norms and standards which guide IAEA.

The OSART group came at the request of the Soviets. This is the first nuclear electric power plant in our country to undergo such a painstaking study by the authoritative international organization. The three weeks of joint work of our own and foreign specialists, noted N.F. Lukonin, USSR minister of Atomic Power, was very beneficial. The development of nuclear power requires combining the efforts of scientists of many countries to guarantee safety.

OSART is also carrying out similar missions at other AES in the world. For example, the Japanese Takakhaka AES recently underwent the same investigation.

Entombment of 4th Chernobyl Unit Continues

18220038b Kiev PRAVDA UKRAINY in Russian 20 Dec 88 p 4

[Interview with I.N. Kambulov by A. Sokol, PRAVDA UKRAINY correspondent: "The Future of the 'Sarcophagus'"; Kiev Oblast; date not given; first paragraph is PRAVDA UKRAINY introduction]

[Text] **The comprehensive expedition of the Institute of Atomic Energy imeni I.V. Kurchatov of the USSR Academy of Sciences is now located in the Chernobyl bus terminal, which in 1986 housed the staff of construction workers who had descended on the ruined reactor. Its collective continues to work on the fourth power unit. What does it represent to them? Why is work underway? I.N. Kambulov, chief of the expedition, tells us about this.**

[Sokol] Igor Nikolayevich, we hear talk in Kiev from time to time about emergency work at the blockhouse. Sometimes "people are running along its roof," and other times "a giant crane" left by the construction workers "is operating again," Is this so? Rumors like this cause unrest.

[Kambulov] Work on the blockhouse really is proceeding. All this is true. As far as the emergency work is concerned, that is invented. The reliability of the blockhouse built at the fourth unit is the same as it was before. There are no reasons to get upset.

[Sokol] If everything is fine, why is the work of which you speak necessary?

[Kambulov] The purpose of the work is to increase the safety of the facility. An extensive scientific-research program is being carried out at the same time.

The object of our concern is above all the nuclear fuel of the destroyed reactor. The explosion scattered it around. Our task is to investigate the damaged building and to establish in which places the radioactive substance lies, how much of it there is and what its state is. Its behavior must be predicted and measures taken to ensure nuclear safety—that is to eliminate any possibility of a spontaneous chain reaction. I emphasize: any possibility!

Our work is unique. We use methods of remote-control observation (television, photographic, visual), and make measurements by means of physical apparatus. The data gleaned in this way has made it possible to obtain a general idea of where and how much radioactive substance remains. This does not, however, pertain to all the facilities subject to study. We have operated primarily in

the western part of the blockhouse. We are getting ready to penetrate to the fuel masses from the east—from the side of the third unit, and from the south—from the side of the machine room.

At present we are measuring directly in the shaft of the reactor—we are, you might say, backing the tiger into the trap. Along some shaft sections, we already have quite a clear picture. We are taking the matter to the point of completing the contour mapping of the fuel masses located even in the subreactor facilities that are hard to reach.

[Sokol] How, specifically, are you carrying out such extremely difficult inspection?

[Kambulov] We are drilling wells, taking a sample of a substance that interests us and sending it for study. This pertains to nuclear fuel as well. We take milligram samples, so that there need be no talk about their effect on the environment.

We do the drilling in three, or if necessary, four shifts. The work is very difficult. If we drill one meter a shift, this is fair speed. It has happened that the count was in centimeters. This is not the entire complication, however. I have already spoken about the places where we are working: where the explosion took place—where the destruction and the radioactive contamination are great.

[Sokol] The people presumably put on special clothing?

[Kambulov] No, they use standard devices for individual protection. We bring the radioactive contamination of the facilities to levels guaranteeing a six-hour work shift. True, it sometimes takes months of stepped up work to do this. We have strict medical norms for personnel radiation in effect: 24 hours a day, for the entire work period. They, incidentally, are lower by a factor of 2.5 than those that were introduced after the accident.

[Sokol] In 1986 Soviet specialists reported to MAGATE [IAEA] that 95-96 percent of the fuel that the reactor had contained remained inside the destroyed unit. Are these data now being reviewed?

[Kambulov] No. Their correctness was confirmed by scientists of various countries. We will deliver the final balance, however, when we map out all the masses that are found in the blockhouse.

[Sokol] I have heard that they seem to be pouring over with liquid. To keep them from migrating....

[Kambulov] We are actually using special compounds, but for different aims—we bind the aerosols in order to rule out the migration of radioactivity.

[Sokol] Work was opened up this spring in the part of the blockhouse where the machine room was. What provoked it?

[Kambulov] After the accident the main forces were thrown—this is understandable—into shutting down the destroyed reactor. Under these conditions, the blockhouse of the machine room was a secondary task. Meanwhile, there was great destruction and intensive sources of radiation in it.

[Sokol] When the dividing wall was built, cutting off the destroyed unit, it was alongside this spot. I examined, as I remember, the gap in the roof and pictured how there, behind the concrete shield being built, the tremor ran along the core....

[Kambulov] Everything that was in the machine room was closed then, in 1986—but by a temporary system. We are saving these facilities. They have been surrounded, specifically, and fenced off the seventh turbogenerator with additional walls. We removed the radioactive heap and blocked up the windows. The main thing is that we are completing the replacement of the roof. It was very contaminated. After this work the radioactivity of individual points of the machine room was reduced one-hundred-fold and over, and the overall background was reduced by a factor of ten.

[Sokol] It seems to many people that the blockhouse is like some hermetically sealed volume. Hence the alarm: they are opening it up—this means they are "releasing" radiation.

[Kambulov] The building of the ruined unit is gigantic, and its facilities are interconnected in the most varied fashion. The task of hermetically sealing the structure erected was not assigned. The blockhouse, however, was reduced to a safe minimum level of bursts of activity into the external environment. This indicator of it, just as at the operating units, is even lower. Scientists, designers and construction workers—everyone who worked here during that difficult time, can be proud of their work.

[Sokol] Igor Nikolayevich, what can be said about the long-term blockhouse? After all, it was built in an emergency situation. The conditions under which it is now and will continue to be in the future, are also unusual.

[Kambulov] I would prefer to divide the answer to this question into two parts. The first pertains to the structures created in 1986. Their life was determined as 30 years. It is difficult to tell the longevity of the damaged structures of the unit. Their certification showed, however, that there are no grounds for serious dangers.

Our collective is now creating a diagnostic system for the structures of the fourth unit. The detector installed here makes it possible to depict clearly how each of the structures will behave. If something needs to be reinforced—we will reinforce it.

[Sokol] But the blockhouse still cannot stand here forever, the time will come when something else will have to be undertaken. I heard that the destroyed unit must

either be buried, "covered" with a mound or have the remaining fuel removed from it. This is what specialists said two years ago. What is the position on this today?

[Kambulov] Just as before, different variants are suggested. A representative coordination council, working at the Presidium of the USSR Academy of Sciences, is examining them.

The idea of covering the mound and forgetting about the destroyed unit, at first sight, seems attractive. More detailed examination of it, however, showed that this variant requires that many problems be solved. Personally, to me it seems more expedient to extract and safely bury the fuel in a special tomb. This is technically feasible.

[Sokol] Approximately when can the work of which you speak begin?

[Kambulov] This is the prerogative of the directors. With respect to time, this work could be tied to the moment when the existing power units of the Chernobyl AES cease operation. Appropriate preparation is naturally required for this.

In the United States, for example, they did not approach the reactor that had suffered the accident at the Three Mile Island AES for four years. At first they constructed an industrial housing, manufactured the necessary robot equipment and only then did they begin to work with the damaged area. The Americans, incidentally, extract the fuel and ship it to a burial site. This work has not yet been completed, even though the accident happened in 1979. This is a lengthy process and requires large expenditures.

[Sokol] You said that you are taking samples of the fuel masses. What can be said about the parameters that characterize them?

[Kambulov] The main thing is that the density of the neutron flow attests to the fact that there is no chain reaction. We have detected no dangerous deviations in the nuclear-physical state.

[Sokol] Specific figures are desirable. General characteristics have so predominated in the past that they have begun to raise people's doubts.

[Kambulov] Figures can also be given. The temperature on the boundary of one of the "fuel spots," for example, reaches 150°C, and the power of the irradiation dose—several thousand roentgens an hour. These parameters, however, are the points where the detector is located. There are many such "points": the accident created an exceptionally complex and heterogeneous system of fuel distribution.

[Sokol] Is anyone else, in addition to your expedition, working at the blockhouse?

[Kambulov] No. But they are helping us. The Institute of Nuclear Research of the UkSSR Academy of Sciences is participating in the work professionally, and moreover quite broadly—they keep a permanent staff of associates. The party organs of the republic and Kiev Oblast respond to our needs efficiently.

The efforts of the expedition collective are directed toward increasing the reliability of the blockhouse, lessening the effect of the destroyed unit on the environment and improving the work conditions for the AES personnel. At the same time, extensive scientific-research work is being carried out. It is calculated for the long-term, for the future.

Hydroelectric Prospects for Lithuania Viewed

18220038c Vilnius SOVETSKAYA LITVA in Russian 4 Dec 88 p 3

[Article: "At the Commission of the Lithuanian SSR Supreme Soviet on Energy"]

[Text] At the meeting of the Commission on Energy of the Lithuanian SSR Supreme Soviet, which was led by S. Gedraytis, chairman of the Commission on Energy and secretary of the Central Committee of the Communist Party of Lithuania, the possibilities of developing small-scale hydroelectric power engineering were discussed.

The exhaustive material for this discussion was presented by scientists of the Institute of Physical-Technical Problems of Power Engineering, directed by Yu. Burneykis, head of the laboratories of this institute and corresponding member of the republic's Academy of Sciences.

As production facilities are expanded and modernized and communal-everyday conditions for the population are improved, the need for electric power increases. These needs can be satisfied only by the development of power engineering and widespread use, for these needs, of organic and nuclear fuel, thus causing deterioration of the ecological situation, or by introducing efficient energy conservation and broader use of local energy sources.

It is inexpedient from the economic and ecological standpoint to construct hydroelectric power plants on large rivers under the conditions of our republic.

The development of hydroelectric power engineering in Lithuania began with the construction of small GES. In 1958, 95 small hydroelectric power plants were in operation in the republic, with a total capacity of 10 megawatts and a yearly electric energy production of 18 million kilowatt-hours.

After that, however, when large electric power plants were constructed and a centralized system of electrical supply created, the small GES began to disappear. Only 11 small GES are presently in operation in Lithuania.

The deputies and other participants at the meeting discussed ways in which to re-establish some of these, particularly where the desired technical and economic effect could be achieved without major capital investments. This can be done, particularly, by re-establishing the Kruostaskaya Hydroelectric Power Plant at the Pakyalta Velena Kolkhoz in Kedaynskiy Rayon. It is proposed as expedient to construct small hydroelectric power plants alongside existing dams or those under construction in Anikshchyayskiy, Shilalskiy and certain other rayons.

It was proposed that the Lithuanian SSR Gosplan, in conjunction with Gosagroprom, the State Committee on Nature Conservation, power engineering and electrification production associations and the Institute of Physical-Technical Problems of Energy of the Academy of Sciences analyze expedient locations to re-establish existing or construct small new electric power plants.

V. Klikunene, deputy Chairman of the Presidium of the Supreme Soviet of the Lithuanian SSR, took part in the commission meeting.

Storm Shuts Down Unit 2 of Ignalinskaya AES

18220039 Vilnius SOVETSKAYA LITVA in Russian 1 Dec 88 p 3

[Article: "A Snowstorm Closed Down the Electric Power Plant"; first paragraph is SOVETSKAYA LITVA introduction]

[Text] **A complicated situation has arisen in the republic these days concerning provision of electric power for consumers. Arturas Mankyavichyus, ELTA correspondent, asked A. Stumbras, chief engineer of the Production Association for Power and Electrification of the Lithuanian SSR, to comment on the situation that has been created:**

On the night of 30 November, when the snowstorm began, 1,130 electric power stations in the republic, which provided electricity to rural consumers, went out of order. Many breakdowns occurred because of the penetrating cold, when the frozen branches of trees and the wind tore down wires. Klaypedskiy, Shyaulyayskiy, Panevezhskiy and Utenskiy rayons suffered the most. By the end of the work day, most of the substations had been repaired. The damages to low-tension lines would be remedied in the next few days.

A major breakdown occurred in the Ignalinskaya distributing units with a power of 330 kilovolts. Because of this, the automatic equipment of the second power unit of the Ignalinskaya AES stopped completely. (Power unit No 1 was undergoing capital repair at that time.) It was the second week that restrictions had been put on electric power in the republic's industry. The needs of some factories were only 20 percent satisfied.

This situation will continue until the end of the week, when the breakdowns at the Ignalinskaya AES have been eliminated. According to technological requirements, following such a sudden shut-down of the reactor, it can be started up again only after two days. (The first power unit is planned for service at full permissible capacity in the middle of December.) Even when both power units start operating, however, the republic's needs for electric power will not be fully satisfied.

A. Khromchenko, director of the Ignalinskaya Nuclear Electric Power Plant, informed us that when the power unit was shut down, the emissions of radioactive substances into the atmosphere did not exceed the norm. Power unit No 1 is slated to be included in the electrical network at the end of the day on 1 December.

Litovskaya GRES Transformer Blows, Is Replaced

18220039b Vilnius SOVETSKAYA LITVA in Russian 8 Dec 88 p 3

[Article: "Damage to Electric Power Plant"]

[Text] On the evening of 6 December, at the Lithuanian GRES imeni V.I. Lenin, the transformer of power unit No 1 went out of operation. It will be replaced with a new one available at the electric power plant. As P. Noreyka, director of the GRES reported, the brief shutdown might have resulted from the age of the transformer. A commission working at the electric power plant is studying the reasons for the breakdown.

A. Stumbras, chief engineer of the Production Association for Power and Electrification of the Lithuanian SSR, informed us that electric power is being supplied to the consumers without additional restrictions, since a second power unit and the first turbogenerator of the first power unit of the Ignalinskaya AES are operating at the rated power. The malfunction at Elektrenai will be eliminated in two to three weeks.

Post-Quake Power Situation in Armenia Viewed

18220039c Moscow SELSKAYA ZHIZN in Russian 22 Dec 88 p 1

[Interview with G.M. Degtyarev, chief of the Association for Construction of Rural Electric Power Networks in the RSFSR (Glavselelektrosetstroy) by B. Sadekov, SELSKAYA ZHIZN correspondent: "The LEP—Not a Simple Line"; date and place not given; first paragraph is SELSKAYA ZHIZN introduction]

[Text] **G.M. Degtyarev, chief of the Association for Construction of Rural Electric Power Networks in the RSFSR (Glavselelektrosetstroy), answers the questions of B. Sadekov, SELSKAYA ZHIZN correspondent.**

[Sadekov] Georgiy Mikhaylovich, forgive me, but somehow I could not bring myself to wish you compliments of the season today: this terrible earthquake....

[Degtyarev] Indeed, for us there is no time for festivities. We are sending specialists, building structures, transformer substations, cable and other equipment to the

rural regions of Armenia to restore the electrical supply. The people need light and heat above all. Even before the picture of the destruction in the villages was clarified, the association, on its own initiative, began to send construction electricians there with equipment from the nearby republics and oblasts. For example, as early as 10 December a detachment of specialists with equipment was sent to the Armenian SSR from Dagestan, and on 12 December—from Rostov-na-Don. Eighty of our workers and engineers are working today in the areas of the calamity. Approximately the same number of people are ready to go out to help at the first request.

[Sadekov] How have you managed not to lose your head in this complex situation? Tell me, do unforeseen expenditures not affect the course of your basic work?

[Degtyarev] This year we should free 422 million rubles of capital investments for the RSFSR. First of all we are hooking up to the power network objects newly constructed in the rural areas: housing, clubs, farms, etc. A total of over 72,000 kilometers of electric power transmission lines of varying power will be run and about 600 transformer substations will be installed.

In the second place, and this is the greatest part of our work, we are rebuilding and repairing the existing network of lines. Every 15-20 years they go out of commission. In addition, their power must be increased by adjusting.

[Sadekov] Of the total volume produced, how much electric power will go to the rural area?

[Degtyarev] Ten percent. For example, in 1987—160.4 billion kilowatt-hours. The power available per worker in agriculture was 5300 kilowatt-hours.

[Sadekov] Is this a lot or a little?

[Degtyarev] As compared with the leading capitalist countries it is little. The indicator in the United States is about 13,000 per worker. The difference stems from the small number of power-intensive machines in our rural everyday life and production. This means that so far we are basically satisfying all agriculture's needs for electric power. But now a process has appeared for active aeration in feed preparation, and feed shops have begun to appear everywhere—this required added electric power, and we did not slow things down. Now the kolkhozes and sovkhozes have begun to build electric boiler houses and we have begun to change over the lines for greater power feed.

Of course, we have problems. Very serious ones, too. Those very electric boiler houses or, let us say, livestock breeding complexes—we call them consumers in the first category of reliability of electrical supply—will not put up with an interruption in the power supply. You can understand for yourself—people cannot be left without heat, or cows—without milking. This means that these consumers should have two network sources of power and one automatic, reserve one. In order to provide them with the second network, enclosed transformer substations (ZTP) must be installed. Here is the snag. The Ministry of the Electrical Equipment Industry is supplying us with hardly any equipment for the substation. In this five-year plan we should install 15,000 units of them, and in the next—37,000. It's beyond me, what to do. The plants of the Ministry of the Electrical Equipment Industry have begun to reduce the deliveries: they say, this is not a state order, and we are hauling it now. What will it be like in the 13th Five-Year Plan?

[Sadekov] How are things going with the installation of self-contained sources?

[Degtyarev] This is not our section. The agro-industrial sections at the sites are concerned with this. It goes without saying, there must be a reserve source of electric power supply for consumers in the first category. After all, everyone knows what the climatic conditions are like in our country. Just this year a hurricane rushed through Sakhalin, and in the southern section of the island alone, 70 percent of the power lines went down. What about the recent icing-up in Odessa and Krasnodar? The supports could not withstand the weight and fell down. The network supply is no guarantee of reliability. Here a farmer should have in reserve a 100-160 kilovolt diesel, or at least a generator, to which a tractor could be hooked up at any given moment to make it run.

[Sadekov] You said that this was the concern of the agro-industrial sections. With diesels and generators—that is clear. But for the rest? Can you not relieve the farms, with respect to electrification of some facility or other, from seeking and "forcing out" equipment, a plan and a contractor? Let the peasants do their work—plowing, sowing, in general, feeding us, while you take on all the electrical matters.

[Degtyarev] This is what we have begun to do. After all, in addition to industrial enterprises, our association also has planning organizations. We have set ourselves the task of turning over completely ready facilities in the future. That is, having obtained the order from a kolkhoz or sovkhoz, we fully prepare the plan, order the equipment and deliver it to the site, install it and adjust it. So far our adjusting work is being held back, but we are developing this subdivision for ourselves. In a word, in Krasnodar Kray and Voronezh Oblast, these services are already organized and the first rural facilities have been turned over completely ready.

PIPELINE CONSTRUCTION, OPERATION

Tyumen-Neftezavodsk Pipeline Completed.

18220021b Moscow STROITELNAYA GAZETA in Russian 21 Nov 88 p 1

[Article (Chardzhou): "A Trunk Pipeline for Siberian Crude"]

[Text] Construction of the Tyumen-Neftezavodsk oil pipeline, over which raw material from Siberia will arrive at the Chardzhou Oil Refinery, has been completed.

Marshy swamps and quicksand did not prevent Glavturkmenneftegazstroy [Turkmen SSR Main Administration for the Construction of Oil and Gas Industry Enterprises] specialists from turning over the job on time. Neftezavodsk, which has grown up in the wilderness, will become a huge industrial center of Chardzhou Oblast, where the East Turkmen Regional Production Complex is being formed. Gas, mining, chemical and other branches of industry are being developed here.

Legislation on Worker Layoffs Clarified

18280050 Moscow CHELOVEK I ZAKON in Russian No 12, Dec 88 pp 17-20

[Article by A. Zaykin, doctor of juridical sciences, and N. Brilliantova: "Labor Contract"]

[Text]

Layoff

A layoff on the administration's initiative is carried out on the grounds established in legislation (article 33 of the RSFSR Labor Code). According to article 33 of the RSFSR Labor Code, a layoff, as a rule, is permitted only with the consent of the trade-union committee of an enterprise, institution, and organization. If, however, it is carried out without the consent of the trade-union committee, the body that examines the labor dispute should postpone its resolution until an examination by the trade-union committee of the matter of consent to the dissolution of the labor contract with the worker. In case of a refusal to give consent to the worker's layoff the trade-union committee adopts a decision on reinstating him in his job.

The trade-union committee's decision concerning the consent to a layoff should be adopted by a competent composition, that is, more than one-half of the members should be present at the meeting of the trade-union committee and the majority of those present should vote for the layoff. If the necessary quorum is not present, the decision is considered not rendered. However, the administration's order based on such a decision is considered issued without the consent of the trade-union committee.

The matter of the worker's layoff should be examined in his presence. Therefore, the trade-union committee must inform him of its meeting. In case of the worker's nonappearance for a valid reason the meeting of the trade-union committee is postponed. If, however, the reason for his absence is not valid, the matter may be examined even without his participation.

The administration has the right to dissolve the labor contract no later than 1 month from the day the consent of the trade-union committee is received.

A dissolution of the labor contract on the administration's initiative without the consent of the trade-union committee is permitted as an exception with respect to individuals indicated in the decree dated 30 September 1965 of the Presidium of the USSR Supreme Soviet; for example, individuals, whose labor disputes are resolved by superior bodies in the order of subordination, or individuals laid off from a combined post or job, and some others.

What are the grounds for a layoff on the administration's initiative?

Article 33 of the RSFSR Labor Code contains nine such grounds.

According to point 1 of this article, a layoff is permitted in case of liquidation of an enterprise (institution or organization), or reduction in the number (staff) of workers. At the same time, worker layoffs in connection with the liquidation of an enterprise do not require the consent of the trade-union committee.

During the reorganization of an enterprise (merging, joining, division, and so forth) labor relations with the worker's consent continue. The termination of the labor contract on the administration's initiative is permitted if, as a result of reorganization, a reduction in the number or staff of workers occurs.

At the same time, there must be, in fact, a reduction in the number or staff of workers at an enterprise (institution or organization).

A preferential right to remain on the job when staffs are reduced is granted to the workers indicated in article 34 of the RSFSR Labor Code. First of all, these are individuals with higher labor productivity and skills. In case of equal productivity and skills preference is given: to individuals with families—if they have two dependents and more; to individuals whose family does not have other workers with independent earnings; to workers with a long service of continuous work at this enterprise (institution or organization); to individuals who received an injury or an occupational disease at this enterprise; to workers improving their skills, while continuing normal work, at higher and secondary specialized educational institutions; to disabled war veterans and members of families of servicemen and partisans, who died or disappeared without a trace during the defense of the USSR.

According to point 1^1 of article 33 of the RSFSR Labor Code, workers who have reached the pension age and have the right to full old-age pensions can be laid off. At the same time, the labor contract with workers receiving disability, long-service, or old-age pensions under preferential conditions cannot be dissolved on this ground until they reach the age of 60 for men and 55 for women and if they do not have the right to full old-age pensions (that is, they do not have the necessary length of service—25 years for men and 20 years for women).

This procedure of laying off individuals, who have reached the pension age, is not applied to workers elected to posts by the labor collective, as well as to individuals, with respect to whom legislation has established another procedure of dismissal from work on the basis of age.

When this point of article 33 of the RSFSR Labor Code is applied, it is necessary to take into account article 18^1 of the RSFSR Labor Code, which grants the administration of an enterprise (institution or organization) the right to maintain, jointly with the trade-union committee, labor relations with workers and employees, who

have reached the pension age, if they work conscientiously and with full efficiency, have high labor results, and enjoy deserved prestige in the collective. In these cases the issue by the administration of an additional order (instruction) on the maintenance of labor relations is not required.

With other workers, who have reached the pension age and have the necessary length of service for granting full old-age pensions, labor relations either continue by agreement between the parties through the conclusion (reconclusion) of a labor contract for a fixed period (for a period of up to 2 years), or are terminated on the administration's initiative with the consent of the trade-union committee.

The dissolution of the labor contract according to **point 2 of article 33 of the RSFSR Labor Code** is carried out in connection with the revealed noncorrespondence of the worker or employee to the position held or job performed owing to insufficient skills or his state of health, which prevent the continuation of this job.

Insufficient skills or the state of health, which hamper the proper performance of labor duties, should be certified by documents.

At the same time, it should be kept in mind that the dissolution of the labor contract according to point 2 of article 33 of the Labor Code is inadmissible with workers not having the necessary production experience in connection with a lack of length of labor service, as well as of special education, if it is not a mandatory condition when the labor contract is concluded. The conclusions of the certification commission on the worker's business qualities are subject to an evaluation in combination with the other evidence in the case.

The dissolution of the labor contract owing to a worker's nonsuitability to the performed job on account of his state of health can occur in case of a steady decrease in work fitness, which hampers the proper execution of labor duties, or if, owing to the worker's state of health, the performance of labor duties is contraindicated for him or is dangerous for members of the labor collective or citizens serviced by him.

Point 3 of article 33 of the RSFSR Labor Code provides for a layoff for a systematic nonfulfillment by a worker or an employee without valid reasons of the duties imposed on him by the labor contract or by internal labor regulations if disciplinary or public penalty measures were applied to him previously. Judicial practice indicates that workers, who have already incurred a disciplinary or public penalty for a breach of labor discipline and have again breached it, the previous penalty not being removed from them either ahead of schedule, or in connection with the expiration of the period (that is, a year has not yet passed from the moment of its imposition), can be laid off on this ground.

Public penalty measures should imply penalties for nonperformance of labor duties applied to a worker by a labor collective, a comradely court, and public organizations in accordance with the statute and charters determining their activity.

According to **point 4 of article 33 of the RSFSR Labor Code,** absenteeism, that is, absence from work without valid reasons during an entire work day (work shift), is a ground for a layoff. Absence from work without valid reasons for more than 3 hours in succession, or for a total of 3 hours during the day, is a ground for a layoff.

A worker can be laid off on this ground only if he is outside the territory of the enterprise (facility), at which he works, for more than 3 hours. Although his presence without valid reasons not at his work place, but on the territory of an enterprise (institution, organization) or a facility, where he is supposed to perform labor functions, including for more than 3 hours during the work day, is a breach of labor discipline, it cannot be considered absenteeism.

Point 5 of article 33 of the RSFSR Labor Codegrants the administration the possibility of laying off a worker in connection with his nonappearance at work during more than 4 months in succession because of temporary disability (with the exception of a maternity leave). In this case a layoff is permitted only during the period of the worker's sickness. At the same time, for individuals suffering from tuberculosis the place of work is reserved for 12 months and for workers who have received a labor injury or an occupational disease, until a full restoration of work fitness or the establishment of disability.

According to point 6 of article 33 of the RSFSR Labor Code, workers and employees can be laid off in case the individual, who previously performed this job, is reinstated in it. This is possible in three cases: 1) reinstatement in the job of an illegally laid off or illegally transferred worker; 2) return of a worker, who was called up for military service and transferred to the reserve, if no more than 3 months have passed from the day of his call-up, not counting the time of travel to the place of residence; 3) return of a worker laid off in connection with a conviction considered illegal if no more than 3 months have passed from the time of entry into force of the acquittal, or rendering of the decision on the dismissal of a criminal case in the absence of elements of a crime and so forth.

For appearance at work in a drunken state, as well as in a state of narcotic or toxic intoxication, workers and employees are laid off according to **point 7 of article 33 of the RSFSR Labor Code.** At the same time, it is of no significance when a worker appeared in a drunken state, that is, at the beginning, in the middle, or at the end of the work day, as well as whether he was dismissed from work or not. Of importance is the very fact of his being in a drunken state during work time at the place of performance of labor duties.

The worker's drunken state, as well as the state of narcotic or toxic intoxication, can be confirmed both by a medical conclusion and other evidence.

Point 8 of article 33 of the RSFSR Labor Code provides for a layoff for misappropriation (including petty) of state or public property at the work place, which is established by a court sentence that came into legal force, or a decision of the body, whose competence includes the imposition of an administrative penalty or the application of public effect measures.

It must be noted that, according to points 1, 2, and 6 of article 33 of the Labor Code, a layoff is possible only in case the administration does not have the possibility of transferring the worker to another job with his consent, or if the worker rejects the transfer.

In addition to the general grounds for worker layoffs on the administration's initiative, **article 254 of the RSFSR Labor Code** establishes additional grounds for the termination of labor contracts of some categories of workers and employees. These grounds will be examined separately.

Problems Due to Reduction in Manual Labor Detailed

18280049 Moscow PLANOVOYE KHOZYAYSTVO in Russian No 12, Dec 88 pp 106-109

[Article by V. Martyanov, subdivision chief in USSR Gosplan, candidate of economic sciences, and V. Rassadin, chief scientific associate of the Economics Institute of the USSR Academy of Sciences, candidate of economic sciences]

[Text] Reduction of the use of manual and heavy labor is an important economic and social problem. Reduction of the number of workers employed at work requiring a low level of skill is one of the main indicators of the level of social development and of the quality of innovative processes and a condition for making work more effective and meaningful and increasing the level of job satisfaction.

Between 1975 and 1985, the share of workers employed at manual labor dropped from 41.6 to 34.9 percent in the industrial sector as a whole, from 75.1 to 69.8 percent on sovkhozes engaged in cropping, from 78.8 to 72.4 percent on sovkhozes engaged in raising livestock, and from 59.9 to 56.4 percent in construction. The average annual reduction of manual workers in the complexes of the national economy has been less than 1 percentage point (0.35-0.67).

Whereas in the period under consideration the number of workers employed at manual labor has been dropping, although slowly, the share of repairmen and adjusters has risen from 12.7 to 14.1 percent. The reason for this was that the share of old equipment needing constant repair and adjustment has risen at industrial enterprises. For instance, the share of mechanized flow lines installed more than 10 years ago was 22.2 percent in 1971 and 49.7 percent in 1985; the share of automatic production lines at least 10 years old was 15.4 and 37.6 percent, respectively.[1]

In 1986 and 1987, the number of manual workers decreased more substantially; nevertheless, there was no major improvement.

At the present time, technical developments exist whose application could entirely replace work that is unattractive and unskilled with machine labor and automated labor in all stages of production. But their application is going extremely slowly. Surveys conducted by the Economics Institute of the USSR Academy of Sciences indicate that about 85 percent of innovations are realized at only one or two enterprises, and those applied in five enterprises or more represent approximately 2 percent. About 70 percent of development projects go no further than manufacturing the experimental prototypes.

The low rate of reduction of the use of manual labor is also brought about by shortcomings in scientific management, the incomplete mechanization and automation of certain production operations, the poor quality of equipment, and so on. Another important reason is that when the advances of scientific-technical progress are applied in the principal production operation, auxiliary, subsidiary, and preparatory departments are quite often ignored, even though great attention should be paid to them when fundamental technical transformations are carried out.

There also needs to be an increase in outlays to change working conditions and the vocational retraining of a sizable portion of industrial production personnel, since technical reorientation mainly involves the realization of complete new technologies. But for many years all-union scientific-technical programs have merely defined budget appropriations to carry out measures related to scientific-technical progress.

Enterprises' own resources allocated for reproduction of fixed capital are not always used effectively either. The explicit principles specifically laid down by ministries as to the use of those resources, as experience has shown, were directed mainly toward stimulating the workers to increase the volume of production under the same production conditions, rather than toward scientific organization and optimization of working conditions (including mechanization). At the same time, even within the limits of the existing physical and financial resources, there were and are real opportunities for modernization and for improvement of the supply of equipment to work stations.

There has been no essential improvement in the state of affairs even since adoption of the Law on the State Enterprise. Specifically, as a practical matter enterprises are unable to obtain credit to carry out measures of their own related to scientific-technical progress.[2] Often, lacking the financial capabilities for full mechanization of production, they have been forced to institute various supplements to the wages of manual workers. As a consequence, sizable resources are spent not to encourage highly productive labor, but to make up for the insufficiency of mechanization. Moreover, most of the supplements are redistributed to the advantage of workers employed at the beginning of the production process where manual and heavy labor predominate. These supplements are, of course, perceived precisely as additional payment for work that is heavy and harmful, and that is why they have no appreciable effect on the quality of intermediate products and workpieces manufactured internally. This system of "incentives" has been having an adverse effect in all stages of the production cycle, but it still suits almost everyone—both those employed at heavy physical and simple manual labor, and also managers. After all, mechanization means that workers have to improve their qualifications, and the addition to the base wage involved here usually does not offset the supplements they received earlier. As for the managers, there is always a certain risk involved in the retooling of production which it is simpler not to take on oneself. What is more, the outlays for retooling production are by no means comparable to the expenditures for remuneration of labor, especially when it comes to introducing the most recent equipment.

As is well-known, in the seventies the principal attention was paid to increasing the growth rate of volume indicators. Every branch and sector was expected to steadily increase the volume of production of commodity output or gross output in value terms. Fulfillment of these indicators was stimulated and urged in every way (for example, appropriation of centralized capital investments was tied to the growth of the volume of production). That is why ministries were motivated above all to engage in new construction and expansion of enterprises. They used resources for that purpose that had been allocated not only for these purposes, but also for reconstruction, which to some extent was favored by the relevant documents on methods and by instructions, which envisage investments in new projects only when retooling is involved.

All of this constituted one of the main reasons for the slow retooling and reconstruction of existing production, and this in turn has held back solution of the problem of reducing the use of manual labor. What is more, in order to guarantee steady growth rates of output outdated enterprises were not closed down, and physically worn-out and obsolete equipment was not scrapped as it should have been. This ultimately resulted in an excessive accumulation of fixed productive capital (assets amounting to more than 2,000 billion rubles are not being fully utilized at the present time), and their age-specific structure deteriorated. The portion of fixed productive capital more than 10 years old was 28.8 percent in 1975, 30.8 percent in 1980, and 36.2 percent in 1985.[3]

The problem of comprehensively solving this problem at the level of the national economy was posed during the drafting (in the early eighties) of the Comprehensive Target Program for Reduction of the Use of Manual Labor (TsKPRT). That draft was not approved as a policy-making document; nevertheless, its drafting had great importance. For the first time, the most extensive material on setting up reporting, planning, and determination of the scale of use of manual labor was collected and summarized for the national economy as a whole. Information that made it possible to estimate with fair accuracy the changes taking place in mechanization of various types of labor in all branches and sectors and in intersector complexes was reduced to a single system. Work on the statistical data on mechanization of labor made it possible to estimate not only the strong and weak points of the methods it was based on, but also to compare it to analogous procedures used in worldwide statistics.

According to what has been written in the press, the share of manual labor in the industry of the advanced capitalist countries is about 8 percent. We believe that this figure is on the low side. In Western statistics, skill, specialization, and prestige are mainly taken into account in the quantitative and qualitative evaluation of labor, not the degree of mechanization or the heaviness, harmfulness, and strenuousness of labor. For instance, the group of unskilled labor, which is frequently judged to be manual, includes car wash personnel, those who work in warehouses, but it does not include patternmakers and gaugemakers. If we take into account the skill structure of workers employed in physical production in our country, then the share of workers employed at unskilled work hardly exceeds 20 percent of all workers. In our country, we still include all manual labor even though it may be work of a rather high degree of complexity (cutters in the garment industry, setupmen, and so on).

In the accepted classification, the terms "manual labor in which machines and machinery are not used" and "manual labor using machines and machinery" have not been clearly stated, and statistical estimates in this area do not altogether correspond to the actual and normative state of affairs. The method for determining machine labor and labor involving machines and machinery has also become outdated, since in certain production operations groups of labor that differ in the character of mechanization have merged. Manual operations may not have been altogether recorded in statistical recordkeeping, for example, because occupations have been combined under a brigade contract or when one worker attends more than one machine. The present vocational classification, which is drafted by ministries, does not

make it possible to ascertain the true scale of use of manual labor. All of this makes it impossible to compare the levels of manual labor in our country with that in the advanced capitalist countries.

Nor do we take into account the actual level of the technological base and that of the entire production infrastructure. To be sure, given that advances of scientific-technical progress are not applied comprehensively, and also in the light of an analysis of vocational censuses, we can suppose that most manual labor is used in preparatory and auxiliary production operations with the exception of the trade sector, agriculture, and construction, where even the principal labor is often poorly mechanized. For example, the level of mechanization of the operations involved in current track maintenance—the lowest in the diverse management of the railroads—amounts to less than 40 percent, whereas, according to recent calculations, 80 percent of these operations could be mechanized.

Analytical statistical tables that would make it possible to examine simultaneously the conditions, content, character, and remuneration of labor by worker categories and the quality of the end product by types of production operation are also lacking. Moreover, we should extend consideration to the entire totality of inefficient labor. Methods of keeping records only on manual labor are not reliable enough either in their form or content.

A new classification of the work of blue-collar workers should be drafted in which the qualification and specific peculiarities of the particular work in question would be reflected and which would better correspond to the groupings customary in international labor statistics. The classification used in our country has not been revised since 1955. In determining the scale of the use of low-skill labor, the following categories need to be singled out in a unified all-union classification: monotonous work, heavy physical work, work that is harmful, and work that is differentiated according to the age and sex of the worker, and recordkeeping should also be set up on the workers actually displaced and specifically redistributed into the social sphere when old technologies are replaced by new ones.

The comprehensive program worked out a number of specifically assigned directives for the 12th FYP. But the all-union scientific-technical programs written at approximately the same time were oriented to a greater degree toward the interests of developers and manufacturers of new technology rather than the consumers of it. So that it was not made possible to completely link the resources allocated to support the comprehensive program to measures to reduce the application of manual labor.

The draft of the TsKPRT identified eight national economic complexes in which the lower limits of displacement of manual labor and approximate size of investments were indicated sector by sector. The measures related to scientific-technical progress were worked out in the TsKPRT so as to take into account the needs of the consumer, but not the interests of the manufacturer, and that is why these programs were well- linked to the multiannual balance of labor resources. The 5-year plan (1986-1990) contained for the first time specifically assigned targets for reduction of inputs of manual labor for all sectors of the economy, and certain branches of machinebuilding were given specific assignments for production of labor-saving equipment.

A number of things developed in drafting the TsKPRT were reflected in the Basic Directions for the Economic and Social Development of the USSR Over the Period 1986-1990 and up to the Year 2000. For instance, they indicated that working conditions had to be substantially improved, faster reduction of the use of manual labor achieved, and its share in the production sphere reduced to 15-20 percent by the year 2000. In the period 1986-1990, the principal task is to reduce its use in all types of activity, especially materials handling, warehouse operations, and other auxiliary operations. A number of assignments have been differentiated by sectors.

It is also advisable in future to establish at the national economic level indicators of reduction of the use of semiskilled labor in the form of approximate interval targets and also to join ministries in working out a single approach as to methods of determining the scale of that reduction, linking them to the necessary allocations required. This approach, which combines methodological centralization with the economic independence of enterprises, will make it possible to plan this effort more effectively than in previous periods.

Improving the soundness of sectoral work done to determine the financial appropriations necessary also has great importance here. The cost principle must be entirely eliminated from the acquisition and distribution of equipment. What is more, it is important to take into account the potential that exists for reducing labor inputs, financial inputs, and other inputs in connection with the specialization of production and establishment of industrial cooperation. This problem was not solved in the drafting of the TsKPRT.

The effort to define effective measures helping to reduce the use of manual labor is made considerably more difficult by the fact that consumers of new technology are poorly informed about its characteristics, quality, and purpose. That is why plans for retooling quite often envisage replacement of old equipment by equipment that is already obsolete instead of new equipment. To be specific, when the TsKPRT was drafted, foreign technical developments in the seventies and early eighties were proposed as promising designs. USSR Gosstandart, whose methods were used to shape this "world" standard, proved in turn unable to monitor in detail all the charts compiled on the technical level of new technology. No essential improvement in the state of affairs has occurred up to this time.

Technical and technological designs proposed must cover full mechanization and automation of production.

Otherwise, as is well- known, technology accumulates in the principal production operation, but there is a shortage of it in the auxiliary operation, which brings about an increase in the absolute amount of manual labor used. But enterprises in machinebuilding are still proposing individual pieces of equipment rather than systems of machines and machinery.

In general, the task of reducing the use of semiskilled labor should be solved by replacing live labor by embodied labor, and the impact of the new economic mechanism should moreover be taken into account here. To a considerable extent it helps to increase motivation to reduce the use of manual labor. Changes for the better are already taking place even at the present time in this area. For example, in making out requests for delivery of equipment in 1988 Gosagroprom gave up some of the combines and tractors and placed orders with a number of machinebuilding ministries for equipment that would eliminate manual labor. The new economic mechanism, as is well-known, also calls for instituting a charge on the use of labor resources that would be differentiated by the regions of the country as a function of the strain on the balance of labor resources. In our view, it would be advisable to establish higher wages for workers employed at manual labor and also a descending scale of those payments as a function of improvement of working conditions and the mechanization of labor.

The problem of reducing the use of manual labor can be divided into two parts; one of them has to be solved by virtue of the resources of cost accounting production associations (when it comes to measures on the intraplant scale), and the other with centralized resources (measures at the intersector level and large-scale sectoral programs for scientific- technical progress). An analysis of data on use of manual labor in various branches of physical production shows that implementation of comprehensive technical decisions made at the intersector level could help to eliminate hundreds of thousands of work stations which have not been mechanized.

For example, at enterprises of 10 industrial ministries (Minnefteprom, Minneftekhimprom, Mingazprom, Minugleprom, Minchermet, Mintsvetmet, Minkhimprom, Minudobreniy, Minlesbumprom, and Minstroymaterialov), where the share of manual labor is highest, and also where heavy and harmful working conditions and production conditions are encountered more frequently, the operations which have not been mechanized are mainly those related to moving, stacking, cleaning, packing, loading pallets, culling, sorting, and so on. Unless, then, a specialized subbranch is set up for full mechanization of materials-handling operations for the production chain between the "manufacturing shop and the freight car," it will not be possible to substantially reduce the use of unattractive manual labor.

The problem of reducing the use of manual labor must not be viewed in isolation, but as an integral part of measures to speed up the country's socioeconomic development and particularly those aimed at optimum use of labor resources as a consequence of radical transformations in the character and content of work and in working conditions. Its solution requires above all a change in the content of unattractive work and the conditions under which it is done. Elimination of technologies and production operations in which monotonous and heavy physical work is used and correspondingly offering opportunity to workers displaced in this connection to work in their vocation and according to their abilities, education, and vocational training—this is an integral part of the party's social welfare policy aimed at guaranteeing an improvement in the quality of life of the Soviet people. What is more, we need to speed up application of the advances of scientific management and scientific-technical progress, and that in turn presupposes further development of social production on the basis of intensification, a rise in labor productivity, and so on.

These two aspects of the process of reduction of the use of manual labor impose not only its unity, but also its internal contradictoriness. Not every socially necessary reduction of the use of manual labor turns out to be economically efficient, exactly as by no means all economically sound measures to develop and improve production result in replacement of manual labor by mechanized labor. It is in fact the task of science to determine the optimum ways of overcoming this contradiction.

Footnotes

1. "Narodnoye khozyaystvo SSSR za 70 let" [The USSR National Economy Over the Past 70 Years], Moscow, Finansy i statistika, 1987, p 88.

2. When associations, enterprises, and organizations lack resources of their own to pay for products or services and the right to obtain bank credit, the superior authority allocates resources to them from the corresponding centralized funds and reserves under conditions of repayment. When these resources are lacking, those authorities for management of the economy (not the enterprises) may be granted bank credit. (See SOTSIALISTICHESKAYA INDUSTRIYA, 12 September 1987)

3. VESTNIK MGU, Series 6, No 1, 1988, p 4.

Plant Chiefs, Educators Discuss Training Requirements

18280038a Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 17 Dec 88 p 2

[Roundtable discussion record by Yu. Durov, V. Dyunin and Yu. Kozlovskiy: "Worker Reinforcements Against a Cost Accounting Background"]

[Text] On this occasion, the Editorial Board of SOTSIALISTICHESKAYA INDUSTRIYA and the USSR State

Committee for National Education invited the leaders of large plants and production associations, the directors of PTU's [vocational and technical schools] and scientists. The purpose of the discussion—to define the troublesome areas in the system for training highly skilled workers and the methods for further developing the professional school.

Opinions concerning the problem were expressed by the following: deputy chairman of the Committee for National Education V. Konkin, director of PTU No. 10 in the city of Lyubertsy V. Menis, chief engineer of the Lyubertsy Plant Imeni Ukhtomskiy S. Torgashin, director of the electro-steel PTU No. 80 Yu. Anpilogov, director of the Elektrostaltyazhmash PO [production association] N. Ryavikhin, director of PTU No. 63 in Lvov V. Kaminskiy, deputy general director of the Lvov Konveyer PO Ye. Glushko, director of PTU No. 16 in Kalinin Ye. Titov, director of the Kalinin Excavator Plant P. Pankratov, head of a laboratory at the All-Union Scientific Research Institute for Professional-Technical Education and Candidate of Pedagogical Sciences V. Kovyrchev, director of the Domodedovo PTU No. 115 Ye. Lekherzak, deputy chief of the Main Planning and Economic Administration for State Education in the USSR Ye. Kashin, director of the Leningrad PTU No. 6 A. Dankman, chief of the Krasnoyarsk Kray Administration for Professional-Technical Education and Candidate of Economic Sciences A. Tayurskiy, director of PTU No. 19 V. Siplivyy, master of production training at this same institute A. Sivokon and head of a department at the All-Union Scientific Research Institute for Profession-Technical Education and Doctor of Economic Sciences G. Lukin.

"Acting alone and without the interested participation of the basic enterprises and labor collectives in reorganizing the professional-technical school," stated V. Konkin in commencing his speech, "it would be impossible to achieve a radical improvement. A need exists for collaboration, co-authorship and a business-like and equal partnership between a PTU and production."

Unfortunately, no substantial changes for the better are taking place in the interrelationships of PTU's with the basic enterprises. To the contrary, many problems of the professional school are becoming more aggravated in connection with the conversion of enterprises over to complete cost accounting.

We are aware that each individual in attendance has his own position and his own point of view regarding the entire range of questions having to do with PTU operations. We are pleased by this fact. We reject decisively the narrow thinking that prevailed earlier. We are awaiting objective criticism and bold, non-standard, constructive proposals on how best to accelerate the renovation of PTU's—where our cadres of workers are formed.

Who Is the Master?

[A. Dankman] We are not at all intimidated by the transfer of the PTU over to the basic enterprise—the Izhorskiy Plant PO. Our relationships are structured upon a contract calling for collaboration. These relationships are not dependent upon market conditions or style. And there is nothing to fear in those areas where a contract is not a fiction, but rather a true document that is strengthened by legal, material and organizational guarantees. At the present time, for example, a tripartite long-term contract has been concluded. The third party is the Northwestern Correspondence polytechnical Institute. Henceforth, 50 of our graduates will annually enter the evening branch of this VUZ. We are combining our efforts directed towards professional orientation and improving the skills of teachers and specialists. The base for theoretical and professional training is being revived. Our personnel in PTU workshops will produce products.

[N. Ryabikhin] Why is it difficult today to find lathe hands? Their work is dull and boring. A modern worker must be characterized by multiple skills and not be only a lathe hand, mill operator or drill operator. He must master the entire spectrum of metal working machines and all of the metal working secrets. Only then will he be able to display interest and intelligence in operating the new generations of equipment. But the problem is not simply one of machines. A young individual must work within the structure of a complex brigade and on a contractual or cost accounting basis. Here it will be impossible to advance in the absence of professional mobility and interchangeability.

It is my opinion that the institutes are not devoting sufficient attention to the training of multiple skill personnel or to professional versatility. Economic education also leaves a great deal to be desired. One reason for this—the isolation of PTU's, training plans and the programs used in the schools from true production.

[P. Pankratov] Our country's plans still do not provide for a unified state policy in the area concerned with the training of skilled workers. For example, a lathe hand can be trained in 2, 3 or 10 months or over a period of 3 years. For this we make available training-production combines, courses, inter-school UPK's [industrial training centers] and PTU's. Is this truly a policy? Or take the problem of professional orientation or the selection of professionals. Even here there is confusion and bedlam. A need exists for a system which will take into account all of the parameters: the interests of an individual, his talents and the needs of society.

There is no need for tilting at windmills! Let us create a unified socio-economic system which will ensure stability in the training of worker reinforcements and a mechanism for retaining them in production. We are already accomplishing something in this regard in Kalinin. We consider a PTU to be our own No. 1 department. And this is not a declaration. We developed measures for

stimulating the moral and material interest of youth. They do not amount to mere promises. The presentation to soldiers who have been discharged into the reserves—PTU graduates—of housing and one-time monetary awards has become the norm. Each year we are building homes for our workers. This amounts to 70-80 apartments. The keys for them are given to those for whom the plant has become their fate and their biography. It turns out that an award of 100-200 rubles is not considered excessive for yesterday's soldier.

[G. Lukin] A chief concern is to create stimuli which will motivate or attract young workers, following discharge from the ranks of the Soviet Army, to return to their profession or to their plant. Here we must not limit ourselves to only a solution for the housing problem. We must ensure the conditions required for continuous social and professional growth in each young individual. Nor do we exclude the use of economic incentive measures. Why should we not recover the expenses for professional training, in favor of the state or a cost accounting enterprise, when a PTU graduate changes his place of work within a period of 2-3 years?

[A. Dankman] We will not be sly about it—quite often a PTU, after having accepted the baton from an eight grade school, has attempted to furnish young people with a so-called secondary education, despite the fact that they may not have been desirous or even capable of learning. It bears mentioning that this is to the detriment of professional training. Moreover, everyone is aware that nothing is to be gained from training carried out under duress. However, a typical stereotype has appeared: it is maintained that young workers must not enter life without certification as to their secondary education. They must have such certification even though they may not possess the required knowledge. Is this not a paradox? Such a distortion is offensive. It corrupts youth and generally deforms their attitude towards work.

It is already 2 years since we rejected this vicious practice. With our initial steps taken in the PTU, we clarify if a juvenile can or wishes to raise his general educational level. No—we include them in groups where they will learn only their profession. And we graduate skilled workers. In addition, we introduced into operations in the institute a system of certification by stages. The lads now have an incentive.

[P. Pankratov] Many recommendations come into being in the stillness of offices—apart from live operations and from production. There is no need for soaring up into the clouds. We must proceed from the logic of life. Why is so little attention being given to the problems concerned with the physical training of future workers? Is it such that nobody notices a youth who engages in production in a puny state and is incapable of operating his machine during a shift? Why is it that age limitations are still being imposed upon some professions?

[Reply] There was a reason for this—the war. Yes and the medical personnel defend their position: it is forbidden and that is that.

[P. Pankratov] Common sense is needed. The present generation of youth, in terms of all parameters, tend to startle us, their grandfathers and fathers. And we view them as being silly individuals. We create hotbed and hothouse conditions for their upbringing and life. Consequently—infantilism.

Who Will Teach?

[Ye. Glushko] We must look to the future. For example, at the present time we are creating joint enterprises with Finland, the FRG and Japan. Who is training cadres of workers for them? Certainly, PTU's. What will ensue from this? First of all, the fact that a modern worker must know the language of economics. And is it really permissible for a young worker not to master a foreign language? Although he need not know it to perfection, he should nevertheless be able to read and understand the rating plate on an item of foreign equipment. The PTU program calls for 40 hours to be devoted to these extremely necessary things. Is this not a mockery?

The professional-technical institutes need training plans and programs which are in keeping with perestroyka and which are employed not in behalf of tomorrow but rather for tomorrow. We must create them together—enterprises, educational institutes, organs of national education.

[V. Kaminskiy] In order to raise the prestige of the PTU's, we must eliminate those training course combines in which instruction is provided on the basis of abbreviated programs—in accordance with schedules which are beneath criticism.

We provide training for worker reinforcements over a period of 2-3 years. We pay the young people a stipend of 70 rubles per month. At combines for the same profession, the training lasts for only 3 months and a higher payment is made for apprenticeship, with no responsibility being shown for the quality of the training. Where should the young people go—to a PTU or to such courses? And a final point. We still do not have anyone in our country who is familiar with our personnel requirements—either for the immediate or distant future. We cannot work this way. Here there is but one solution—a conversion over to the contractual system for training cadres of workers.

[Ye. Titov] Just as in the past, the problem of cadres of experts for production instruction continues to remain acute. We are not pleased with the level of professional training possessed by the graduates of industrial-pedagogical technical schools. Can very much be taught to an expert whose working skill does not exceed the 3d or 4th category?

In all probability, the solution lies in attracting the best production workers to engage in teaching work and to attending PTU's. We will then have a guarantee for worker expertise and we will avoid mediocrity. But should a fine professional be enticed by today's wages for a PTU expert? Certainly not.

[Reply] The staffing of a PTU table of organization only with specialists from a basic enterprise is an unrealistic proposal. We must radically change the status of affairs in our industrial-pedagogical technical schools. The book-learning and theoretical education provided by these schools must be supplemented by fine—at the level of the 5th or 6th work category—professional training.

[V. Menis] Quite often, efforts directed towards training skilled workers simply disappear in the sand. In our case, they are nullified by DOSAAF. For example, we spend 3 years teaching young people to be trouble-shooters for machines with programmed digital control. And yet DOSAAF, guided only by departmental considerations, wins the student youth over to its side where they take courses in learning how to drive motor vehicles.

Several months prior to the completion of work at a PTU, the youth literally storm the director's office: let us learn to be motor vehicle operators! Everyone of the youth wishes to acquire an operator's license and moreover they wish to do it free of charge! But what will this lead to? The prestige of the PTU's will be undermined and the plant departments are rendered lifeless. Indeed many DOSAAF students, following their army service, enter taxi pools rather than plants.

[P. Pankratov] I am not offended by the army command and yet I am convinced that its attitude towards the question of cadres of workers is anti-perestroyka. Must we continue the deep-rooted practice of calling up young workers for military service on a general basis and without taking into account the civilian specialty obtained in a PTU?

Electronic equipment trouble shooters are sent to construction battalions, builders become missile personnel, tractor operators become communications specialists and radio equipment installers become tank personnel. The army centers for retraining are operating at full capability. Millions of rubles worth of national funds are being wasted. But nobody wishes to look truth straight in the eye and calculate the material and moral damage. Yet it is quite obvious: 40 percent of the youth return to plants from the armed forces. Is it not time for the army and national education "generals" to sit down at a table for the purpose of conducting negotiations and finding an acceptable solution?

[G. Lukin] PTU workers and enterprise leaders are constantly raising the question as to why young workers—graduates of vocational and technical schools—cannot obtain deferments from their call-up into army service. At least for a year. They maintain that this would enable the youth to master their professions to a better degree and to consolidate their position at an enterprise. I believe there is still another and more realistic path. Today many young men and women are able to complete their professional-technical education at the age of 16-17. This is occurring first of all owing to the fact that children are now entering school at the age of six. Secondly, in the senior grades we are seeing a differentiation among the students according to their work profile—including their technical profile. If under these conditions the principle of program compatibility is realized in a competent manner in a school or PTU, assuming that all unnecessary duplication of training material has been eliminated, then the desired one or two years will be available prior to the call-up for military service.

[N. Ryabikhin] Personnel are trained for our enterprise by a technical training department, a professional-technical institute and a machine-building technical school. It would seem that this is a strong arrangement: worker reinforcements arrive via three independent channels. A check reveals that these are more on the order of tiny streams rather than channels. One reason for this—their isolated nature. Thus we are automatically reminded of Krylov's fable involving a swan, crawfish and pike. A great amount of effort for a miserly return. The departments suffer from a chronic shortage of machine operators. For today—200.

Moreover, each of these forms for training new workers has its own defects and flaws. Theoretical training at the plant is lame in both legs. The excuse? Shortened training schedules. A lack of teaching personnel. Yes and we provide instruction here, more accurately we train, in accordance with a narrow profile, for simple operational types of work.

But such isolation is wasteful. Money, equipment and materials must be distributed among three bases. There is no intent here to offend anyone or to treat someone unfairly. But the plant treasury is near the breaking point. We see the solution as involving the creation of a single plant center for the training of workers, with the PTU being transferred over to the plant's balance.

[G. Lukin] The discussions regarding the advisability of transferring a considerable number of PTU's over to enterprises, ministries and departments are not abating.

It is our opinion that there is a more effective model for administering and financing professional-technical schools. The training-production workshops of PTU's can be maintained at the expense of enterprises which have converted over to cost accounting and self-financing. The general and theoretical management and financing of theoretical training, including general educational training for a portion of the youth, would be carried out by the state in the form of USSR Gosobrazovaniya [State Committee for Education] and its

branches in the various areas. This is not a new model. It is extremely similar to that which was carried out successfully in the GDR and the ChSSR [Czechoslovak Socialist Republic].

And there is still another variant—cost accounting. It can be carried out under conditions involving free sales and purchases of means of production and a conversion over to unified instructional content for the same professions, regardless of the forms for training young workers. Differentiated norms for the cost of professional-technical training—depending upon the degree of complexity involved in the profession—are established for this purpose.

Not every enterprise that converts over to cost accounting will undertake the unusual function of training workers. It is economically more advantageous to pay a specialized institute—a PTU—for providing such training.

[N. Ryabikhin] We favor specialized institutes. We wish to avoid a situation in which, "from on high"—from our ministry or municipal party committee—an order is suddenly received: train so many builders and so many drivers. And this is issued to a PTU or base, the personnel of which are oriented only towards the training of machine operators.

Such tasks were normal up until recently. This was no exception. Are they not aware up above that expertise cannot be instilled in a worker on the basis of tables and that each such strong-willed "order" demands the creation, by ourselves and the PTU, of special offices, laboratories and training grounds and also a search for teachers? Otherwise it is a profanation and not professionalization. An attempt to create a logistical base for 10-15 professions in one institute—this is a myth.

Who Will Pay?

[V. Menis] Unfortunately, the well-being of a particular PTU today is dependent upon the benevolence of the basic enterprise and its logistical potential. We will forever be in a humiliating position—with extended hand—if we do not succeed in implementing, by analogy with the Law Governing a State Enterprise (Association), the development and introduction of a law governing an educational institution. We cannot delay in carrying this work out. Where is the sense in reviving the statute governing a professional-technical institute, since it does not touch upon the interrelationships of PTU's with the basic enterprises and other enterprises, under conditions involving a conversion over to cost accounting and self-financing? Once again they direct us to the Statute Governing a Basic Enterprise of a Professional-Technical Institute, as approved by the USSR Council of Ministers. But, as is known, it merely recommends and is in no way binding.

It would appear that the conversion that has now been carried out, over to the training of skilled workers at PTU's, on a contractual basis with enterprises, has raised the problem of collaboration from top to bottom. But here there is a reservation. The "basic enterprises" sign any contract that does not affect their tight purses. And often they refuse to do this if a question arises concerning the need for paying for the training of workers. And in the absence of this contract, nobody needs a piece of paper.

[V. Kaminskiy] In the Ukraine, 840 professional-technical institutes remained subordinate to the republic's Ministry of National Education. They possess a tremendous potential—manpower and more than 5,000 training-production workshops with a machine pool consisting of tens of thousands of items of production equipment. The annual volume of products and services provided by the PTU is valued at 30 million rubles. Tomorrow these volumes may be sharply and repeatedly increased. This will require the creation of a training-production association that will be responsible for coordinating production activities. This unique headquarters could concern itself not with the overall or methodological management of the professional school, but rather with organizing the training for youth to enable them to produce the complicated products needed for the people and country.

[A. Tayurskiy] We also favor the creation of a training-production association for professional-technical education. True, for Krasnoyarsk Kray. At the present time, our request to conduct an experiment concerned with improving the professional training of skilled workers at PTU's, under cost accounting conditions, is being discussed within USSR Gosobrazovaniye.

They have estimated that the net savings in funds from the implementation of this plan will amount to more than 400,000 rubles over a period of 3 years and overall the state budget will realize a savings of more than 3.4 million rubles. We are hoping to receive support.

[Ye. Lekherzak] I believe that our proposal is no worse than the others. The institute wishes to convert over fully to cost accounting. We are convinced: the economic relationships with enterprise-customers alone will bring to a halt the endless debates concerning the role and place of the "basic enterprises" in the destinies of the PTU's.

The training for 1 worker costs us 1,600 rubles. And those who wish to acquire one of our graduates, will have to pay the institute this amount in full. It is clear that the enterprises will reject poorly trained specialists. Thus, in order not to become bankrupt, we must steadily raise the quality of professional training and look for ways for training youth for work in a better and cheaper manner.

And the specialists should be paid wages depending upon the effectiveness of their work—based upon how many and which workers they trained.

And there is no need to bind us to a basic enterprise. This is an anachronism. The future belongs to economic relationships.

[A. Sivokon] I am a production training specialist. My idea is to conduct an experiment on converting a training group over to complete cost accounting and self-financing. We already have a packet of contracts for the production of various types of products. At the moment—1,070.

We can use this money to pay wages to the youth, to pay for the work of teachers and specialists, who we wish to attract, and to compensate fully for the expenses of an institute.

At first, we would like permission for my group to have its own press and its own bank account.

Do not think that our youth will make money only by the sweat of their brows. We have sufficient time, strength and resources for all.

[G. Lukin] Nevertheless, emphasis must be placed upon the fact that complete cost accounting can be introduced into the PTU'S only when those enterprises which converted over to self-financing and self-recoupment voluntarily order the training of young workers at professional-technical institutes, with payments being made for this specific service in accordance with the established normative prices.

[Ye. Gluskho] Our foreign trade firm was the first one created in the country. We also have the first joint stock company.

Let us support the good initiatives and the people who are advancing them. I can state directly that I am in agreement with those speakers here who advocated following the unbeaten path leading to a revival of the professsional school and to a new quality in the training of skilled workers.

[V. Konkin] I wish to thank sincerely all those who participated in the "roundtable" discussion for their business-like and constructive proposals. Each one of them is deserving of attention and serious consideration.

AUCCTU Official Discusses New Wage Reforms

18280060 Moscow SOTSIALISTICHESKIY TRUD in Russian No 11, Nov 88 pp 88-95

[Article by S. Shkurko, director of the AUCCTU Scientific Center and doctor of economic sciences: "The Organization of Wages Under the Conditions of Radical Economic Reform"; first two paragraphs are SOTSIALISTICHESKIY TRUD introduction]

[Text] *The discussion of V. Vladimirov's article[1] has far exceeded the limits of the problems he touched upon in wages and work stimulation in various branches of the national economy. Generally supporting his article, readers are suggesting different approaches to the solution of these problems and recommending fundamentally new concepts for organizing wages and distributive relationships.*

In your view, how should wages be organized? The editorial board has directed this question to economists, economic leaders of all ranks, scholars, workers, and all readers of the magazine. We are waiting for your articles, letters and suggestions.

***

Historical experience shows that any reforms in the economic area cause changes in the organization of wages. They are an unavoidable consequence of the changes in income planning and formation, in production management forms and methods, in the ways to evaluate enterprise activity, etc. Let us recall the 1965 economic reforms. It was at that time that they began to establish a material incentive fund and a fund for social and cultural measures and housing construction and introduced rewards for annual work results; additional wages for revising output, time and servicing norms; and other incentives. It even seemed that such a local change in management as the Shchekinskiy method would involve the formation of stable—or norm-based—wage funds and supplementary payments for combining trades, expanding service areas and increasing the amounts of work performed and that the practice of transferring the remaining FZP [wage funds] to the material incentive fund at the end of the year would set in.

The economic reforms, which are now being carried out, are more radical than the previous ones. They have posed the task of transferring enterprises to complete cost accounting, self-financing, self-support [samookupayemost], and self-management. The changes in the organization of wages must, therefore, be more substantial, and it is no accident that the following question was among the many tasks assigned by the July 1987 CPSU Central Committee Plenum in the area of improving the economic mechanism: How should the wage system be reorganized?

A question arises here. You see, all production branches are carrying out important steps to improve the organization of wages during the current five-year period. Is this a restructuring of wages? In order to answer that question, it is necessary to analyze the new payment conditions from the viewpoint of their compliance or noncompliance with the radical reforms.

Two reform avenues mainly affect the organization of wages. The first one is the expansion of enterprise economic independence and the second one is the development of self-management. Concerning the former, the new conditions for paying for labor are in complete

agreement with the reforms. They provide for a significant expansion of enterprise authority in organizing wages. Now, enterprises themselves develop statutes on awarding bonuses and they themselves determine whom to give an incentive to and in what amount. Their capabilities to use various additional payments and increments and to establish official pay rates within the limits of the "brackets" are being expanded.

Of course, one can argue about the completeness of enterprise authority in organizing wages and question its further expansion; however, there is no doubt that the rights, which they have received, permit them to single out in pay highly qualified workers who have achieved the best results in their work.

It is necessary to draw a fundamentally different conclusion when analyzing the new conditions for paying for labor from the viewpoint of the second avenue in the reform—the development of self-management when enterprises shift to complete cost accounting, self financing and self-support [samookupayemost]. In accordance with the USSR Law on a State Enterprise (Association), a labor collective approves the economic and social development plans and internal labor regulations, selects the director and resolves many other important questions concerning vital functions. We are actually talking about substantial changes in the forms for realizing socialist property relationships. Whereas previously these relationships were basically realized by state management agencies, including the enterprise administration, they are now chiefly realized by the labor collective. It is the collective, using public means of production, that earns cost accounting income and decides how to dispose of that part of it remaining in the enterprise. These fundamentally new economic relationships are displayed to a greater degree during the use of the second cost accounting model.

Under the new management conditions, wages as part of cost accounting income should depend on the final work results of the enterprises. Today, when the new economic mechanism is still not operating fully, this is still not being seen; however, as the reforms are implemented and when demand and supply in the market place begin to affect the labor collective's income more noticeably and when the competitive system for obtaining state orders is in effect, wages will become a quantity derived from the amounts of resources earned by enterprises to pay for labor. Only those, who earned them, i.e., the labor collective—the master in the enterprise—can distribute them.

From these viewpoints, the new conditions for paying for labor directly contradict the economic reforms. The organization of wages is built, as before, on the base of earlier stipulated work norms and payment norms, i.e., on tariff rates, piece-work prices, official pay rates and using additional payments, increments, bonuses, etc. That is why each one can claim a payment that he has personally earned regardless of the enterprise's final economic work results and regardless of cost accounting income.

The starting position in reorganizing wages is the shift from calculating them based on earlier stipulated labor norms and labor payment norms to distributing the work collective's FZP among workers based on their work contribution to the enterprise's overall results. However, one should not understand this position simply as the abolition or elimination of work norms and labor payment norms. It only says that the distribution of the assets earned by the labor collective is becoming the basic and dominant factor in organizing wages at the enterprise. Work norms and labor payment norms can be used only during distribution.

Therefore, the distribution of the assets earned by the work collective emerges in first place in organizing wages. The experience of enterprises, where steps are being taken to restructure intra-plant management along contract principles, testifies about how such a distribution can be conceived. Here, the assets for wages for workers in the important structural subdivisions—as a rule, the contract shops—are first formed (earmarked) within the limits of the total wage assets. These assets are not simply earmarked for them; they earn them depending on the shop's results and the contribution to the general work results of the enterprise. This is the way the first step is taken in mediating the relationships of the wage assets earned by the labor collective.

Different methods for forming the wage fund are being used. It can be formed based on norms per unit of production (work) or in accordance with a growth norm as is being done at the enterprise level. In several of them, norms are being established for the formation of resources to pay for the work of contract collectives using the wage fund and the material incentive fund. Subsequently, they are being combined into a common collective wage fund. The wage fund can be formed as part of the contract collective's income computed on the basis of intra-plant prices for products (services) or stipulated as a percent of the enterprise's total FZP.

The above-mentioned three main ways to form a contract collective's wage fund can be used simultaneously in one and the same enterprise but in different subdivisions. For example, the second method is used in the main shops; and the first and third—in auxiliary shops and the management staff. Only one thing is important: Under any one, a common wage fund is formed because only in this case will the contract principle be observed—that the entire amount of assets for wages be paid to the collective for the completed work that corresponds to all prescribed requirements (quantitative, qualitative, product list, expenditure) without dividing it into main, additional, bonus, etc., parts.

Naturally, if the contract collective does not fulfill certain requirements, the wage assets, calculated on the basis of norms or previously established as a percentage of these assets, should be reduced. If work results have exceeded the planning indicators, then an adjustment can be made in the direction of raising them.

It is necessary to point out that cases, where the total amount of the subdivisions' wage funds exceeds the assets that the labor collective has earned to pay for and stimulate work, are possible. Different structural changes in production, which have not been provided for beforehand, often have an effect. The noted contradiction is solved in two ways: by creating a reserve wage fund in enterprises and, if this is not sufficient, by reducing the wage fund formed in the contract collectives.

Both in theory and in practice, the question arises: "Using what amount of wages is it necessary to calculate the norms (percentages) for forming the FZP?" Many lean to the fact that these amounts have to be determined on a scientific basis, using valid labor norms and labor payment norms. In this case, however, it would be necessary for some subdivisions and, consequently, workers to reduce the wages that have been established and for others, on the contrary, to raise them. For all the justice in such an approach, it is more than problematical to carry it out in practice. That is why, whether we want it or not, it is necessary to orient ourselves on the wage level that has taken shape although this does not deny but, on the contrary, even assumes a certain adjustment in the established norms (percentages) in the future, considering the existing discrepancies in wages. This adjustment can restrain the wage growth in those collectives where it has been artificially raised.

The assets earned by the labor collective are distributed between the contract collectives. Now, it is necessary to form (allocate) wage funds to the internal structural links: sections, brigades, departments, and sectors, and to take the second mediating step in the distributive relationships in the enterprise: to bring the earning principle to each worker.

There can also be variants here. First, basic wages are formed based on existing labor norms and labor payment norms, and the remaining part of a contract collective's FZP is distributed among the structural links in accordance with their contribution which can be expressed quantitatively using the KTV [work contribution coefficient] or some other method. This variant is being widely used in construction trusts. Second, a contract collective's wage fund is distributed based on the direct accounting of group results, for example, in proportion to the output achieved by the internal structural links. Third, the wage fund is distributed in accordance with the KTV established by labor collective councils. The determination of the share (percentage) of each internal link in the overall wage fund of these links can be a form of the KTV.

The last step is the distribution of the collective wages of the contract collective's internal structural links among workers. The same methods can be used here as were used during the formation of the FZP of these links.

The overall schema is as follows. It proceeds from the establishment of a direct connection between each one's wages and, not only, their own results but—what is the main thing—the work results of the structural links, contract collectives and the enterprise as a whole. This requires substantial changes in all the former elements for organizing wages, their place and role in wages, and also application practices. The structure of wages and their planning, calculation and statistics must be changed.

The question of the place and role of tariff rates and official pay rates is the most complicated one. What should they be? Voices have been recently heard: "Once earned assets are distributed, are tariffs and pay rates needed?" Of course they are needed, although not in the same form as today.

A number of reasons explain the need for maintaining tariffs and pay rates. The first one is connected with the fact that the substantive aspect of labor: its complexity, conditions and the responsibility and qualifications of the worker, are taken into account through tariffs and pay rates. Without such an accounting, it is impossible to organize labor, effectively form the professional and qualitative composition of personnel, and use and stimulate labor. In their present form, it will be difficult to use tariffs and pay rates before long. With the introduction of the second cost accounting model on a broad scale and the shift of large structural subdivisions to the collective contract, their use will become practically impossible.

The existing system of tariffs and pay rates will come into opposition, on the one hand, with the substantial differences in cost accounting incomes going to wages in different enterprises and, on the other hand, with the shift to evaluating the labor contribution of the workers under the conditions of self-management. It is evident that those collectives, which will be able to achieve a relatively large income per worker, will manifest interest in further improving work results; and this will evoke an objective need to establish higher tariffs and pay rates. The use of tariffs and pay rates, which have been reduced in relation to earnings, has always been a substantial deficiency in organizing wages. The concrete and accurate evaluation of the labor of workers by labor collectives themselves will make the advisability of using, for example, a list of heavy and harmful work to establish increased tariffs rates and pay rates questionable. The YeTKS [Common Tariff Qualification Reference Book] proficiency level characteristics will turn out to be not fully suitable for requirements.

Under these conditions, it would be logical to shift to the centralized establishment of tariff rates and pay rates for a relatively small number of worker proficiency level groups and to the introduction of minimum and maximum tariff rates and pay rates for each group with a large difference in their amounts. Four proficiency level groups are foreseen for workers. The tariff for the first group would, for example, range from 100 to 150 rubles a month; for the second—from 130 to 180; for the third—from 160 to 210; and for the fourth—from 190 to 260 rubles a month. The pay rates for specialists and employees would be established in a similar manner. It is necessary to say that socialist countries are already traveling this route, for example, Bulgaria where steps close to ours are being taken to improve the economic mechanism.

The second reason is connected with the need to provide social guarantees that the workers will receive a minimum wage. The conversion of the labor collective into the master at enterprises does not mean that it is now becoming the owner of the instruments and means of production. The latter remain public property, and this is an important basis for the fact that society guarantee workers a minimum wage if the labor collective's cost accounting income turns out to be insufficient for these payments.

Whether insurance funds for this purpose are created within the framework of the branches or at the level of state power agencies is not important. The main thing is to insure a social guarantee for the reproduction of manpower and not in general but for each proficiency level group. Minimum tariff rates or pay rates must be guaranteed to them. The mentioned guarantees must be provided right up to the elimination of the enterprise or its exit from a crisis situation.

The third reason consists of the need to establish unity in wages not only at the level of social guarantees but also for maximum amounts. It would be incorrect to allow any differences in wages, guided only by the opportunities which the cost accounting income of the work collective provides. Workers with one and the same proficiency level, who are performing similar work and who have approximately identical output, should not have earnings that distinguish them from each other disproportionately. It is necessary to add to this that factors, which are not connected with the collective's work contribution to the enterprise's final economic work results have a certain impact on the amount of cost accounting income directed toward wages.

Of course, the establishment of tariffs and pay rates by itself will not insure unity in wages. In addition, workers receive additional remuneration for their work. The percentage of tariffs in the workers' earnings, for example, has often fallen to 60 percent. Because of piece-work additional earnings, bonuses, additional payments, increments, and other types of incentives in various enterprises, wages substantially different in amounts are often formed.

Therefore, unity in wages must be insured for wage levels and not for the amounts of tariff rates and pay rates. This can only be achieved under the new management conditions through the use of economic methods. A real opportunity exists to introduce a progressive tax on a certain portion of wages—a tax which would be extracted from enterprises from the wage fund earned by the labor collective. For example, if the wages of a given worker proficiency level group exceed the maximum amount of tariffs or pay rates by 30-50 percent, the tax on that portion of wages would be set, for example, at an amount of 25 percent; if the wages exceed the maximum tariffs rates or pay rates by 50 percent or more, the tax will increase to 50 percent.

It is evident that work collectives will not move toward such taxes. It will not be advantageous for them to expend cost accounting income so irrationally. It is much more effective to keep it for a further growth in wages and to use the freed assets for other purposes.

What should be done with increments, additional payments and bonuses that are being widely used in our practices to stimulate high work results? In examining this question from the new viewpoints, you come to the conclusion that they must gradually cease to be used. If tariff rates and pay rates are sliding ones and a larger or smaller tariff (pay rate) can be established for one and the same worker depending on his work contribution, then why are additional payments, increments and bonuses needed? When tariffs and rates are stable and do not change for a long time, the need for some way to increase the workers' wages naturally arises.

The introduction of increments, additional payments and bonuses has always been formally presented as a measure aimed at strengthening the worker's interest in his work results; however, it has not been quite this way in actuality. Arriving at a production facility, people always want to know the salary that they will receive for performing the work entrusted to them. Concerning the wage elements, from which their wages must be formed, this—although also important—was always secondary. It is no accident that the entire salary, which this or that worker will receive, and not the tariff, pay rate, increment, bonus, etc., is indicated separately in the "Wanted ..." announcements of enterprises.

One cannot fail to consider the fact that any addition to the tariff (pay rate) for work over and above the prescribed labor norm creates an interest in the workers to reduce these norms and prevents their review. The historical experience in organizing wages in our country convincingly shows that all payments over and above the tariff rates have simultaneously become a brake on the use of sound high labor norms. Piece-work additional

earnings will always be higher when the output norm is lower. Likewise, a bonus will be higher if the plan, quota, and raw material expenditure norms are less strenuous. Additional payments for combining trades or expanding service areas will also be higher if the servicing norms and numbers are not sufficiently sound.

The time has come to think seriously about the moral, ethical, and indoctrinational aspect of increments, additional payments and bonuses. We have become accustomed to the fact that they are an incentive for better work, but modern highly mechanized and automated production facilities require collectivism in work, smoothness in all of their links, identical attention in all divisions of the single technological process, and frequently, equal productivity at the various work positions. The use of increments, additional payments and bonuses often leads to a worsening of the social climate, separates people, and evokes a desire to burst through to the front although this is not justified by technology.

The present level of development of production forces and the high requirements for quality in servicing, work and production are more and more requiring that everyone work equally well. We often strive at any cost to reveal the best one and, if this is not managed, we artificially attempt to create him through the incentive system. Today, it is no rarity for a KTU equal to a unit to be applied to every worker in progressive brigades. This is evidence that every one is working with equal efficiency. It would seem that it is necessary to see a positive process in this. We criticize such brigades and try to prove that it is not possible for everyone to work with identical productivity although the most important principle of socialism—working in accordance with one's abilities—is being exactly demonstrated here.

If a brigade or contract collective earns assets for wages, it has objectively put together the conditions for expanding collectivism in work. Here, everyone must work according to his capabilities, and this insures a high moral spirit and a good social climate. As a result, the job progresses successfully. It is no accident that the old attribute of socialist competition—individual socialist competition—is disappearing in contract collectives.

Lastly: it is incomprehensible that increments, additional payments and bonuses can be used under the conditions of advanced self-management. The contract collective itself distributes the assets earned for wages. Who will establish the increment or bonus? The administration? The trade union? If it is even possible to assume that the administration has nevertheless established an increment for someone, the collective can easily disavow it when distributing the wage fund among the workers. In other words, the increment will have been formally introduced, but it will have no impact on the actual earnings of the worker. It is not surprising, therefore, that some contract collectives are already not using increments, additional payments and bonuses today; but are distributing the earned wage fund among workers in accordance with their work contribution. Stable differences in the substantitive aspect of labor can be successfully taken into consideration through sliding tariff scales and pay rates.

Now, concerning the place and role of labor norms. It was already generally stated that they must serve not to calculate wages but to evaluate labor when distributing collective earnings. How is this perceived concretely? For example, a contract collective consists of a number of brigades paid by the job. It is evident that output norms are required in such a case. Previously, they were used to calculate collective piece-work rates and, subsequently, to determine the degree of fulfillment of the output norms and compute the collective piece-work earnings. Now, they are needed to compute the output achieved by the brigades. For example, one of them has worked 10,000 norm hours; and another—15,000 norm hours. The collective wage fund of the contract collective must be distributed in proportion to these amounts. It is extremely likely that it would be necessary to use not the norm hour but the norm wage indicator to evaluate the brigade's output in order to account for the complexity of the work in the brigades. The collective earnings of the brigade could be distributed between its members in proportion to the output achieved by each worker.

Likewise, it is possible to use other labor norms, for example, norms for handing over products at the first presentation, norms for producing first quality products, raw material expenditure norms, etc., when distributing the assets earned for wages. The workers' interest in the norm would be diametrically opposite to today's. Instead of a striving for a reduced norm and a lack of interest in reviewing it, the need to use only thoroughly sound labor norms would appear in the workers. You see, the equity in distributing the collective earnings will depend on this: If you produce more, you can receive more from the common money-box. By itself, the degree of fulfilling a norm does not have any significance because we are talking about the distribution of earnings. Previously, a high degree of norm fulfillment provided the worker a reason for demanding unearned money. Now, he must understand that only his actual work contribution to the overall results determines his share.

As a result, one of the more substantial shortcomings in organizing wages—the use of payment labor norms, i.e., those which must guarantee the wage level that has taken shape or been planned—would be overcome. For the sake of this, it is necessary with stable tariff rates and pay rates to conscientiously reduce output norms, plans and quotas. The norm's real significance is now returned to it: to organize labor better, evaluate each one's contribution, plan production, calculate its costs, and instill in workers the attitudes of industrious proprietors. Everyone will become interested in this.

The interest in sound norms will evoke a healthy interest in labor collectives toward those norms which departments and their scientific organizations are developing

today. Over many years, the organs of state management have seen to it that the labor norms calculated by them were binding on enterprises. This question is now being removed. Norms determined in a centralized manner can only have a recommendation nature. Labor collectives themselves must decide whether or not to use them and, if they are used, then in what manner.

The changes in the organization of wages, which must occur under the conditions of the radical economic reforms, will cause a significant simplification in the structure of wages. If one does not consider the different compensating payments, it will practically consist of two parts: tariff (pay rate) and super-tariff (super-pay rate). The relationship between these parts can be different in enterprises. On the one hand, it will depend on the amount of the labor collective's wage fund; if it is a large one, then the percentage of the tariff (pay rate) will be less. On the other hand, with equal wage funds one labor collective can keep tariffs (pay rates) at a lower level and another one—at a higher level, considering their specific work conditions.

The labor collective itself will determine their amount. However, this does not mean that it will begin to pay for work only in accordance with the maximum rates (pay rates). For this, it is necessary to earn the appropriate wage fund. However, even with this fund, the differentiation in the workers' wages in connection with the differences in the substantive aspect of their work will lead to the fact that the average tariff (pay rate) will always be lower than the maximum one. At the same time, in order to provide labor collectives an opportunity to differentiate wages substantially, it is necessary to maintain the average tariff (pay rate) at a certain level; and this assumes a periodic review of the tariffs and pay rates. Their establishment within the limits of the "brackets" does not remove, therefore, this problem.

The introduction of new wage conditions during the current five-year period using the assets of the enterprises themselves shows that this is possible and is a good economic lever for an additional growth in labor productivity. This procedure must be maintained in the future. Restructuring the organization of wages will make it more logical, economically sound and stimulating.

At the present time, the introduction of the new wage conditions is being carried out in the form of an important but, nevertheless, a campaign. In enterprises, special commissions are being established, searches for internal reserves are being conducted, opportunities for increasing tariff rates and pay rates and improving the practices of using the other elements in wages are being tried within the limits of the resources found. However, after the introduction of the new payment conditions, the campaign ceases until some later time unknown to anyone.

With the restructuring of the organization of wages using the new principles, tariffs (pay rates) can be reviewed without a special campaign to search for reserves and within the framework of the super-tariff (super-pay rate) portion of wages. Increasing the FZP as a result of good work leads to the fact that the super-tariff (super-pay rate) portion is increased in it and, consequently, opportunities for increasing rates and pay rates are created. Their growth is always a greater incentive than the introduction of different types of increments, additional payments and bonuses. A worker agrees to work more diligently if he receives a larger stable wage.

It only remains to establish in a centralized manner new tariff rates and pay rates for the next five-year period and give labor collectives themselves the right to introduce them as they accumulate super-tariff (super-pay rate) portions of the wage fund. This will considerably strengthen the interest of labor collectives in the final economic work results and will make it permanent.

The new approaches to organizing wages are also connected with the economic reforms and with self-management. That is why it is necessary to determine what authority the labor collective should take upon itself in the wage area. The USSR Law on a State Enterprise (Association) does not give a specific answer to this question. It only points out the general directions for this authority: insure conformity between the workers' wages and their personal contribution and an objective distribution of social benefits, plan measures contributing to the observance of the principle of social justice, etc.

Since the labor collective earns cost accounting income and answers through this income for shortcomings in the activity of an enterprise, it must enjoy broad authority in distributing that portion of cost accounting income which is allocated for wages. It would be unfair and economically unsound if the labor collective earned money and answered for its activity but someone else distributed the earned assets for it. A number of conclusions can be drawn from this.

The norms (percentages), on whose basis the overall wage fund is distributed between the large structural subdivisions, must be approved in the labor collective council. It is necessary to determine here the entire procedure for forming and distributing wage funds. A decision about adjusting wage funds considering the specific work indicators of the subdivisions (links) is made monthly in the labor collective council when summing up the results of the contract collectives' economic activity and in the councils of these collectives and their internal structural links. Brigade, department, sector, or group councils determine the individual earnings of workers. Together with them, the enterprise labor collective council assumes the review of controversies in evaluating work and distributing wage funds on the basis of this evaluation. They actively participate in solving

questions about putting workers in this or that proficiency level group, in evaluating the substantive aspect of their work, and in establishing tariff rates (pay rates) for them within the limits of the maximum and minimum allowable amounts.

As a result, a social evaluation of work, instead of an administrative and bureaucratic one, will be in effect. Every measure to improve the organization of wages will be socially recognized. The interest of the different worker groups in this important area of production life will be revealed and satisfied significantly more fully than under the previous management system. All of this will contribute to expanding the workers' labor and social activity and to making the human factor more active.

The preparation of documents for the labor collective council and councils of the collectives is a perogative of the administration. The trade union committee of the enterprise and the trade union bureaus of the contract collectives must take an active part in this matter. Monitoring the administration's executive activity in the wage area is now the direct responsibility of the labor collective council and the councils of the collectives and, subsequently, of the trade union committee. The former have been called upon to look after the correctness with which the principles for distributing the assets, which have been earned by the labor collective, to wages are being realized. The latter must watch over the levels and ratios in the wages of the different trade groups of workers, the equity in evaluating the work of each worker, and the movement of individual salaries.

It is evident that restructuring the organization of wages in enterprises will cause definite changes in the information and statistics system in the wage area. These changes must primarily proceed from the fact that, on the one hand, labor collectives themselves have broad authority in the wage area; however, on the other hand, society must not allow a chaotic movement of wages and differences in wages that are unwarranted and that do not correspond to the principles of social justice. The need for the permanent monitoring of changes in the average tariff rates (pay rates) and average wages for the proficiency level and social-trade groups and for the introduction of statistical accounting and information based on these indicators proceed from this. Only with the adjustment of this accounting and information can steps, which oppose impermissible deviations in wages, be taken. These measures must primarily touch on the formation and expenditure of the cost accounting income and the taxation of wages. We talked about this above.

There is no doubt that the information on wages, which is submitted to the labor collectives, will have great significance. The unity of interest of the different worker social and trade groups can play a positive role in organizing wages—a role which is unknown to us today. A fundamentally new function will open up for the trade unions who are vitally interested in guaranteeing unity in pay.

Many aspects of the coming restructuring of the organization of wages have already been plotted in the work practices of contract collectives, which are becoming more and more with each day. As contract relations expand both at the enterprise level (second cost accounting model) and within its framework, these tendencies will strengthen. If one does not cope with this complex and serious task in time, the organization of wages will become a serious brake on the path of restructuring social and economic relationships in production.

Footnote

1. V. Vladimirov, "Problems In Restructuring Wages", SOTSIALISTICHESKIY TRUD, No 12, 1987.

Wage Changes at ESSR Enterprises Explained

18280039 Moscow EKONOMICHESKAYA GAZETA in Russian No 50, Dec 88 p 5

[Article by Yu. Sillaste, director of the Estonian Branch of the Scientific Research Institute of Labor, candidate of Economic Sciences, and V. Ryaek, head of the Department, candidate in Economic Sciences: "Experience in Wage Restructuring: How Estonian Enterprises Evaluate It"; first paragraph is EKONOMICHESKAYA GAZETA introduction]

[Text] **"I remember reading an article in EKONOMICHESKAYA GAZETA, 'The republic has converted to new wage conditions,' which told of the wage restructuring in Estonia. I should like to learn in greater detail how this work was carried out, its results and the attitude of the workers themselves toward the new wage rates and salaries." N. Akimova, economist, Volgograd (from an answer to an EG questionnaire)**

***

One of the main results of the wage reform which was completed in the republic in all the production sectors can be regarded as its positive effect on the growth of labor productivity. In nine months of 1988, it increased in industry by 5.1 percent as compared with 4.7 percent in 1987 and less than 3 percent in preceding years.

For the first time in a long period in the production sectors, the number employed was reduced: in 1987—by 13,000 and this year, by 17,000 already. This made it possible to improve the situation for provision with labor resources. In this year alone, in the nonproduction sphere, 1200 persons were redistributed, and the number

employed in the republic's kolkhozes grew by 4000 persons (the rest have been released—some have retired and others have gone into cooperative work).

Work on improving wages after the transition to new wage rates and salaries, cannot, of course, be considered completed. Right now it is particularly important to improve organization and wages on the basis of developing intereconomic accounting, coordinated with the principles of full cost accounting.

We are also continuing to analyze the experience in carrying out wage reforms, which is important for the practice of transforming other aspects of economic life. After all, it is a question of reckoning with the innovative economic interests of the people.

The Stereotype of Distrust

Let us take, for example, a problem such as the obligation to the psychological factor into account. Any economic innovation, in the process of its realization, feels the strong effect of the people's varying attitude toward it, which, moreover, changes in the course of time. Perception of innovations often immediately discourages the innovator-enthusiasts. They usually expect a lightning-like effect the day after the order for the forthcoming changes is signed. Alas, however, no immediate effect is detected. Such "surprises" must be particularly prepared for when introducing new wage rates and salaries, and converting from leveling and "withdrawals" to the genuinely socialist principles of stimulating high-quality labor.

The sociological studies made in the course of the wage reform, and queries on the opinions of various categories of workers helped us, in consideration of the results obtained, to introduce the necessary correctives into the work.

For example, the need to take into consideration the stereotype of distrust of the innovations was revealed. The point is that the illegality of the economic transformations of 1965 and 1979 "enriched" our economic planners and specialists with the social practice of caution. This quality of the social memory was not properly taken into consideration when working out solutions to the forthcoming wage restructuring. As a result, the period at the turn of 1986-1987 was characterized by a rapid change in mood, an odd mixture of heightened expectations and old apprehensions.

Here is another characteristic point. From the multitude of publications on wage reform, the people at first perceived only such key words as "raising rates and salaries." The fact that the means to this had to be earned by their own efforts somehow remained in the background. With the realization of this interrelation, the initial enthusiasm in many collectives was literally replaced from month to month by dejection, and even pessimism, and then by waiting: what would the "chief" undertake?

The directors of the enterprises also often appeared confused at first. After all, according to the conditions of the wage reform, the number of different variants of carrying it out at an ordinary machine building enterprise could reach up to 90. In order to seek the means to raise wage rates and salaries, it was necessary to demonstrate independence in choosing the most efficient of the possible ways and prove in practice the correctness of the decision made by the collective. Here, no stereotype of obedient execution of a method of action prescribed from above, formed during years of command-administrative methods of management, could come to the rescue.

Here is an example of a quite typical way out of such a situation. Since there was not enough initiative, some economic directors, just as before, tried to restrict themselves to "tossing" the problem to the appropriate administrative service, as usual. The queries that we made showed that at first 85 percent of the directors of the enterprises investigated had relied on "paying off" the restructuring organization of the wages with small forces, that is, with the forces of workers in the department of labor and wages, the norm-setters. Only gradually came the realization that for success in the matter all the services of the enterprises and the entire creative potential of the work collective must be drawn in.

The Participation of Each Person

This can be achieved above all through widespread information, even instructing each worker on the forthcoming changes in wages. This is also one of the important conclusions of our work.

We succeeded in determining two basic groups of factors, substantially influencing the people's attitude toward the introduction of new wage rates and salaries. In the first place, there are the general conditions of work at enterprises, which in the initial period of economic reform sometimes substantially influence the interests of the people and the stimulation of the work activity, which is restructuring the wage organization.

In the second place, there are specific changes in organizing the wages and the workers' participation in them. Let us say, the results of regrouping the work according to revised rates, evaluating the qualification level, certifying the work places and changes in the administrative structure can substantially affect the social-economic position of the workers. For example, labor intensiveness will increase, the vocation or work place will have to change, wage differentiations will be intensified, etc. All this touches upon the interests of the workers and affects their aims, expectations and actual behavior.

Special quick-questionnaires made it possible for us to reveal the specific dynamics in the attitudes of the people toward the new wage conditions and the level of their knowledge of them.

A study made in July 1987 showed that 94 percent of the specialists and only 45 percent of the workers knew about the forthcoming changes. At the same time, only 64 percent of the specialists and 38 percent of the workers rated the level of their knowledge as adequate.

This, so to speak, is of cognitive interest. How, though, can the workers participate in practice in revision of the rate conditions?

It was revealed that the necessary importance was not always attributed to this. The data from two questionnaires in July and September 1987 showed that there had been practically no change in the relative proportion of both workers (84 and 83.6 percent) and specialists (58 and 59.4 percent) who had not introduced any suggestions in the period of training for introduction of the new wage conditions. These data indicate that the creative potential of the collectives was insufficiently utilized.

How Is the "Critical Mass" Obtained?

The economic mechanism that had existed for many years formed a low-initiative type of worker, who had been strongly inculcated with the fact that initiative was punishable. To count on an "instantaneous" change in the stereotyped behavior of the workers means, at least, groundlessly simplifying and lightening the task. Taking our experience into account, the rate must rather be made for a single layer of workers, not too large in number, who make active use of the possibilities opened up by the wage reform, to earn, to increase their labor productivity and to strive to improve the state of affairs in production. It is these workers who, in time, can constitute the "critical mass" which will make it possible to achieve positive changes in the microclimate of the work collectives, make them irreversible and increase and do away with stagnant phenomena.

Judging the process of forming this "critical mass" can be done with full objectivity from the data on wage differentiation. It is particularly interesting to compare the data on the 10 percent of the total number of workers at an enterprise that have the lowest wages and the 10 percent that have the highest wages.

This analysis at Estonia's industrial enterprises shows that for most of the worker categories the degree of wage differentiation was intensified. For example, in the republic's local industry, the wage differentiation for the 1986 level, after introducing the new rates and salaries among the enterprise specialists, increased by 26 percent, for employees—by 10, for directors of the central unit—by 7 and only among the workers with wages based on a time rate was it reduced by 6 percent.

It is also important to ascertain, whether people intensified their striving to increase their wages. This can be done by comparing the wage obtained by the worker and the wage desired by him. A questionnaire of workers in July 1987 showed that about 90 percent wanted to earn more than the wage that had formed and approximately 10 percent expressed no such desire. After all, however, at the end of 1986 a questionnaire at 28 enterprises attested to the fact that 23 percent of the workers were planning without fail to increase their incomes, 51—as far as possible, and 26 percent did not plan to increase their incomes. This means that the effect of the reform is at hand.

Comparison of the results of the query in July and September, however, introduced interesting new points into this evaluation. In July 1987, the relative proportion of those among the workers dissatisfied with their wages was 19 percent, and specialists—40 percent, and in September 1987—respectively 18 and 15 percent. What caused the difference? We came to this conclusion: in the process of wage reform and accompanied by certification of the specialists, there was an interpretation by the workers of their actual work place in production, their potentials. The requirements imposed on the work places and on the collective, on the work conditions, became more realistic. The fact that for some of the workers the prospect of a change in shift became fully possible also had an effect.

Also characteristic here are data on the dynamics of the dissatisfaction of workers of various parties with the production life. From February to October 1987, the relative proportion of unsatisfactory work conditions was reduced by a factor of 1.6, and of labor organization—by a factor of 1.7. Hence the just conclusion that, as the result of introducing new wage conditions, the prestige of the work place grew.

The First Step Should Be Followed by Others

How do the workers themselves evaluate the results of the wage reform? In December 1987, two groups of workers were queried. One of them took direct part in introducing the new conditions. The second consisted of workers who still worked in the old way, and were preparing for changes. Here is the distribution of answers to the question, "What effect have the wage reforms had on your activity?" (in percents)

	Group I	Group II
Volume, tension of work increased, and wages accordingly	43	5
Volume, tension of work increased, but wages did not essentially increase	31	16
Everything stayed the same	16	43
Difficult to reply	10	36

This means that the "start-up year" of wage restructuring had a considerable influence on the workers' positions. These data also attest to something else—the need to increase the effectiveness of the new wage conditions, for after all, 26 percent of those queried had felt no changes.

We feel that introducing the new wage conditions is not a one-time campaign, it is only the first stage in wage reform, which will in no way quickly exhaust its potentials. They must be better utilized and supported by organizational measures.

Wage restructuring will be much more successful if measures are simultaneously implemented to convert enterprises to the second model of cost accounting, and the shops and brigades—to contract work principles. As soon as the people feel that the chief has turned his back on the wage reform, considering it to be a regular campaign, completed, a feeling of dissatisfaction with the wages will begin to increase slightly in the work collectives.

This is confirmed by the data from the questionnaire sent, at the end of the first quarter of 1988, to 2040 workers and employees of enterprises that had converted to the new wage conditions no later than the middle of last year. 32.3 percent of the workers and 23 percent of the specialists were dissatisfied with the wage level, which is considerably fewer than in the fourth quarter of 1986, but higher than in the third quarter of 1987.

Therefore, unless the other enterprises comprising the new economic mechanism are restructured, there is no particular basis for anticipating complete success from introducing new wage conditions.

Pay Bonuses To Scientists Recommended

18280059 Moscow SOTSIALISTICHESKIY TRUD in Russian No 11, Nov 88 pp 29-32

["Labor Scientific Research Institute Recommendations on Awarding Bonuses to Workers in Scientific Organizations"—SOTSIALISTICHESKIY TRUD headline]

[Text]

1. The present recommendations have as their goal the improving of the awarding of bonuses to workers in scientific organizations when they shift to complete cost accounting and self-financing.

In this regard, the awarding of bonuses should guarantee the workers' interest in achieving and outstripping the world level in scientific and technological development; increasing the labor effectiveness of scientists, designers, industrial engineers, and other specialists; strengthening the ties of science with production; and satisfying the needs of consumers for new equipment and technologies in every possible way.

2. The organization independently develops a Statute on Awarding Bonuses to Scientific Workers, Specialists, Employees, and Workers. It determines the amounts of and procedure for awarding bonuses based on the requirements for accelerating scientific and technical progress, increasing the scientific level of research, raising the effectiveness of solutions, and strengthening the creative activity and work results of scientific workers, designers, industrial engineers, and other specialists.

The director of the scientific organization approves the statute in coordination with the trade union committee and the work collective council.

The workers in the scientific organization must be told at least a month in advance about the coming into effect of the statute on awarding bonuses, changes to it or its repeal.

3. The awarding of bonuses to workers in scientific organizations is accomplished by using assets from the material incentive fund or common wage fund from the portion allocated for these purposes in accordance with the expenditure estimates for the appropriate fund, which the organization's leadership, trade union committee and work collective council have approved; and by using assets arriving in accordance with special bonus-awarding systems (for winning contests conducted between organizations, for assistance in streamlining and innovating, etc.).[1]

4. The statute on awarding bonuses provides for a differentiated approach in encouraging employees, taking into consideration the tasks being specifically solved by them. In this regard, it is possible to pick out five groups being awarded bonuses:

—directors of main activity subdivisions, research workers, and specialists directly engaged in performing scientific research and design, plans and specification and research work;

—workers in the scientific and technical subdivisions (metrological, patent and licensing, etc.);

—leading workers in scientific organizations: the director (chief, manager), his deputies, the chief engineer, the manager (chief) of the planning and production (planning and economic) department, the scientific secretary, and the chief bookkeeper;

—workers on the management staff (besides the above listed leading workers), including employees in the subdivisions' planning and economic department, bookkeeping department, etc.;

—workers.

5. The awarding of bonuses to workers, who are directly engaged in the designing of a scientific and technical product, is carried out upon completion of each specific operation (subject, draft, development, or their stage).

In this regard, the total planned amount of bonuses is passed to the collective of those, who will do the work, before work begins. The bonus is paid to the collective in the prescribed amount after the work is completed and the stipulated requirements for its scientific, technical and economic level have been achieved. When the qualitative indicators of the scientific and technical product exceed the assigned ones, the bonus is raised accordingly.

6. When distributing bonuses within the collective, the contribution of each research worker and specialist to the final work results is taken into account, generally speaking, with a consideration for the functions specifically performed by them. The stated results are described by the indicators for the level of the scientific and technical product stipulated in the contract (task) in comparison with what has been achieved.

When doing this, such evaluation criteria as the scientific and technical level of the scientific, research and development work; the novelty and significance of the concepts and solutions; the complexity of the assigned tasks; the economic and social effectiveness of the work; the time frames for realizing the results obtained during the research and work; the scale in using scientific and technical achievements; the quality with which the documentation is compiled; the decrease in the time for performing research and design work; and the reduction of costs and labor-intensiveness in the work being performed, are used.

It is advisable to define the listed criteria concretely and supplement them in conformity with the organization's specific activity based on the content of the work being performed.

For basic research, it is mainly necessary to take into consideration the depth in studying the subject, which permits essentially new knowledge that outstrips the world level in this area to be obtained; for applied scientific research and design, drafting and technological work, the main stress should be on the scientific and technical level of the work, the observance of technical tasks, the number and scope of inventions and streamlining proposals, the presence of new design (technological) solutions, the absence of errors in the recommendations and work and of violations of stipulated time frames, etc.

The awarding of bonuses to a subdivision director is done in accordance with the work results of the subdivision as a whole and his personal contribution to the carrying out of specific subjects and projects.

The work contribution of research workers, designers and industrial engineers is also evaluated based on the quality and time frames in completing tasks, the display of creative initiative, the amount of work performed, and the absence of errors.

It is advisable to determine each worker's share of the total incentive amount during a meeting of the participants for each operation after it is completed. The actual achievements of a given scientist and specialist should be considered.

In cases where several subdivisions are solving the assigned task, the bonus can be distributed between these subdivisions before determining the incentive amount for each worker: as a preliminary before the beginning of work—depending on the planned amount and complexity of the research or development; and finally after it is completed—considering the actual contribution to the overall results.

7. It is recommended that intermediate work results on the subject and plans and specifications be summed up periodically (at times determined by the average duration of time for that category of workers to complete the work) and that a worker's personal contribution (KTU) to each of the operations, in which he participated during that period, be evaluated. The overall evaluation (KTU) for that period is drawn from this.

Depending on the prevalence of creative elements in a worker's activity or, on the other hand, of repetitive operations, it is advisable to use an expert (non-formalized) or quantitative (formalized) evaluation, respectively, or a combination of them.

An evaluation by experts manifests itself in a description of the successes and shortcomings in a worker's activity based on established criteria for his work results. It is advisable to compare the achieved results with the average indicators for this qualification-functional group for the organization in general (lower than the average, corresponding to the average, higher than the average, and exceptionally high).

A quantitative evaluation of a workers' work results consists of the fact that the degree of achieving selected criteria is expressed quantitatively (in numbers, coefficients). The criteria themselves are correlated based on their significance relative to each other by establishing a specific weight for them in the overall figure (usually, a unit).

The evaluation is calculated as the number of points (or coefficients) for each category, which count in the quantitative expression of that criterion's specific importance.

This method is normally recommended for use when evaluating the work results of research workers, designers, industrial engineers, and other specialists engaged in applied research.

This method assumes the presence of sufficient experience in developing evaluation criteria. That is why its introduction is recommended only when there is confidence in the validity and reliability of the indicators being used to determine labor effectiveness. A quantitative evaluation can also be established in the form of a labor participation coefficient (KTU).

8. It is advisable to award bonuses to workers in scientific and technical subdivisions (metrological, patent and licensing, etc.) based on their fulfillment of obligations to the corresponding subdivisions—the development engineers of the subjects and plans and specifications.

Within the framework of the bonuses prescribed for the subdivision's collectives, a bonus is paid to each worker in a differentiated manner depending on his personal contribution to the collective work results.

The mentioned workers can also be awarded a bonus for carrying out specific subjects and plans and specifications if they were their executors.

9. Leading workers in the organization: the director (chief, manager), his deputies, the chief engineer, manager (chief of the planning and production (planning and economics) department, scientific secretary, and chief bookkeeper, are awarded bonuses for raising the scientific and technical level and effectiveness of research and development with a 100-percent fulfillment of contract obligations.

As an indicator describing the scientific and technical level and effectiveness of research and development, it is recommended that the percentage of research and development performed at a world level be used.

In cases where the qualitative parameters of the activity cannot be compared with the world level (in particular, during the conduct of humanitarian research), it is permissible to evaluate them according to the number of works that have received a high rating from customers.

Higher organizations establish the specific indicators and procedure for awarding bonuses to the directors of a scientific organization in coordination with the appropriate trade union central committee.

10. Workers in the management staff (except leading workers) are primarily awarded bonuses for fulfilling the contract obligations of the organization as a whole with a consideration for the subdivision's work indicators and for raising the scientific and technical level and quality of the research and development being performed.

11. Workers are awarded bonuses for fulfilling production tasks from both the wage fund and the material incentive fund or from the common wage fund.

In those cases where workers are included in a creative brigade, they can be awarded bonuses based on the indicators of its work that are common for all categories of workers.

Bonuses for brigade members within the framework of the total allocated amount are determined in a differentiated manner in accordance with their personal contribution to the overall work results.

12. Only workers, who have demonstrated high achievement in work, are recommended for a bonus.

Those workers, through whose fault low quality fulfillment of the work, a decrease in the main indicators for the technical and economic level of the work being performed when compared with the approved technical goal, an increase in the estimated cost of the work, a violation of the time frame for completing and handing it over to the customer, a distortion of scientific information and production omissions have been allowed, cannot be recommended for a bonus.

The director of the organization draws up a list of these omissions and violations with a consideration for the laws in effect and with the concurrence of the trade union committee; the director of the higher organization draws it up for the leading workers in coordination with the appropriate trade union body.

13. Information from the bookkeeping and statistical accounts, certificates for the introduction of completed work, certificates of the customer's acceptance of the completed work, and—when performing basic and research work—the decisions of the appropriate scientific (scientific technical) council are used to evaluate the fulfillment of the indicators for awarding bonuses.

14. The director of the scientific organization determines the amounts of the bonuses for the collectives or for individual specialists, employees and workers in coordination with the trade union committee and work collective council.

The amount of the bonus for each worker recommended for a bonus is determined, within the limits of the total allocated to the appropriate subdivision, in a differentiated manner and considering his personal contribution to the achievement of high indicators in the organization's activity.

The higher organization determines the sizes of the bonuses for the directors of scientific organizations.

15. The maximum amounts of the bonuses for directors, specialists and employees is as follows:

—for fulfilling the prescribed indicators for the awarding of a bonus—nine monthly official pay rates a year;

—for special systems—2.6 monthly official pay rates a year.

Bonuses based on the results of all-union and republic socialist competition are paid to a leading worker in a scientific organization over and above the mentioned bonuses; however, they cannot exceed 1.4 official pay rates a year.

Bonuses for workers are not limited by maximum amounts.

16. Bonuses to workers for developing and introducing new equipment and advanced technologies and materials, which correspond to the world level or exceed it based on the most important indicators, are paid over and above the prescribed maximum amounts.

Lenin prizes, USSR and union republic state prizes, USSR Council of Ministers prizes, other one-time prizes that are established and paid with the permission of the USSR Council of Ministers, and USSR and union republic state and public organization prizes are also paid above the stipulated maximum amounts.

When calculating the bonus amounts for a collective of workers, the bonuses for specific specialists and employees are, generally speaking, determined in accordance with their personal contribution to the overall work results and are not limited by maximum amounts.

17. The bonuses, which are paid from the material incentive fund (common wage fund), are considered during the calculation of the workers' average wages in the manner established by legislation now in effect.

Supplement

Schematic for Distributing a Collective Bonus Totaling 6,000 Rubles to Those Performing the Work Considering the Personal Contribution of Each Worker, Expressed Through the KTU

No	F.I.O.	Position	Official Pay Rate	KTU	Bonus
1		Department Manager	280	1.6	800
2		Senior Scientific Associate	300	3.0	1500
3		Senior Scientific Associate	320	2.6	1300
4		Lead Engineer	260	2.8	1400
5		Lead Engineer	220	0.6	-
6		Engineer Designer, 3d category	200	2	1000
7		Engineer	150	0.8	-
Total			1730		6000

Notes:

1. The KTU is established during a collective's expert discussion of work results based on the general opinion concerning a specific worker's contribution to the overall results or as the product of the coefficients, each of which describes a worker's achievements according to previously stipulated criteria and indicators.

Workers, having low work result indicators (in this example, those below a unit—0.6 and 0.8), are not recommended for a bonus. That is why the KTU total for the collective (brigade, subunit) is 12 (1.6 plus 3.0 plus 2.6 plus 2.8 plus 2.0) in this case. The value of one coefficient unit is equal to 500 rubles (6,000 divided by 12).

The bonuses are computed using the rules for distributing collective wages (500 rubles times 1.6 equals 800 rubles; 500 rubles times 3 equals 1,500 rubles; etc.).

2. The total amount of the bonuses for the main results of this collective's activity, calculated by the increasing total for the year, cannot exceed the actual official pay rate fund of its workers for nine months, including increments and additional payments to the pay rate (the maximum amount for work that does not correspond to the world level). In this example, 1,730 rubles times 9 equals 15,570 rubles.

Decree number 491/26-175 of the State Committee for Labor and Social Problems and the AUCCTU Secretariat dated 18 November 1986 establishes the list of increments and additional payments that can be considered during the computation of the maximum permissible amounts of bonuses.

Footnote

1. The formation of the material incentive fund is accomplished in accordance with the CPSU Central Committee and USSR Council of Ministers decree entitled "On Transferring Scientific Organizations to Complete Cost Accounting and Self-Financing" and with the "Type Statute on Procedures For Forming And Using

Material Incentive Funds During 1988-1990 in Enterprises, Associations and Organizations That Have Shifted to Complete Cost Accounting and Self-Financing."

The formation of the common wage fund is accomplished in accordance with the above-mentioned CPSU Central Committee and USSR Council of Ministers decree and the "Type Statute On Forming the Common Wage Fund During 1988-1990 For Enterprises, Associations and Organizations That Have Shifted To Complete Cost Accounting and Self-Financing."

ORGANIZATION, PLANNING, MANAGEMENT

Kabaidze Discusses Work of Ivanovo Machine Tool Plant

18230035 Moscow SOVETSKIY VOIN in Russian No 22, Nov 88 pp 2-4

[Article by N. Andreyev, LITERATURNAYA GAZETA correspondent, specially for SOVETSKAYA VOIN: "Boldness of Thought and a Sense of the New"; first paragraph is SOVETSKIY VOIN introduction]

[Text] What depends on what—a delegate of the 19th All-Union Party Conference, general director of the Ivanovo Machine Tool Association and Hero of Socialist Labor, thinks about this.

Man has an interest in new things built into his genes. He wants to find out a great deal, and mainly—to create something new for himself. It is very difficult to suppress this striving in him. In the years of stagnation, however, it must be said, they managed to do this. Now it is very difficult for us to rid ourselves of the inhibiting heritage.

I will speak of the sphere of life closest of all to me—economics. Creating anything new here always entails a risk. If you have dared and it has turned out well for you, they may praise you. But if the experiment ended in failure or you did not achieve the expected results, most likely they will punish you, or else dismiss you from work. This means that a person "encouraged" by punishment is hardly apt to feel like taking another risk. The experience he paid for makes him cautious about another one. If someone still makes an attempt to break forward, he is called to order and slowed down. As the final result of this attitude toward the matter, the country and the entire nation suffers.

We at the enterprise decided, twenty years ago, to break with the standing procedure—even though we understood how dangerous it was for us. To go without bonuses, incentives and other social blessings—that was the least that threatened us. Nevertheless, we decided to engage in a real cause: to manufacture machining centers, which at that time were unknown in the country. Without going into technical details, I can say that this one center replaced several machine tools. "All this, of course, is remarkable," they said to us. "But really, one deserves to be no better than he is. Why should you draft projects?"

Yes, the attempt to make a little provincial plant, in no way remarkable, to take on the output of products on a world level, caused only a smile. It is the same as if the manufacturers of adding machines took on the development of computer production a year later.

But we did! And we created a machining center. At first they marveled at all the innovations at the VDNKh [Exhibition of USSR National Achievements]. Then at foreign exhibitions. A victory? Indeed. The most difficult sort of work, however, stood behind it. Machines in our country are usually developed in no hurry, in about ten years and more. Moreover, the designing as such does not occupy a great deal of time—a year at the most. The rest of the nine-ten years are spent in estimates, agreements, collecting permits, meetings, construction mock-ups, experimental models and manufacturing test batches.

We have cleaned our work of bureaucratic layers. To put it simply, the most complex machine tools were manufactured almost from sketches. These sketches make experts' heads spin. Many say: this is impossible! It is possible, if you want it to be. The risk, of course, is maximum; the design and manufacture of machine tools must be practically error-free. Creative minds, however, seem to have been waiting for this liberation. They worked without noticing how time flew. How attractive the result, however! Today I thought—in six months I saw the idea conceived put into metal. Where else can you get that feeling?

The main figure at our enterprise was the designer. His duty was not simply to create the design, but to make it the least labor-intensive, with the smallest number of parts. Our trust in him was unlimited. Indeed, it could not be otherwise. There is no sense in distributing responsibility among dozens and hundreds of people in various agencies. You will not find the guilty party if anything crops up. Therefore, the designer takes on the full responsibility. Along with me, the general director. Only two signatures are needed to begin work on an innovation: the designer and the director. This is in general one of our main principles: each one should personally take responsibility for the end result. Personally—the worker, personally—the head designer, personally—the technologist and personally—the general director.

My director-colleagues often say: I would like to make remarkable machine tools, but another director, who supplies me with poor-quality metal, prevents me. Another complains that they give him poor-quality coke or something else. So it goes. The circle closes. We broke off with it—despite all the "objective circumstances." The end result was entry onto the foreign market. How many products an enterprise exports under the conditions of strictest competition—that shows who is who.

What does work on the foreign market give us? There your commodity is evaluated in a very critical way. The capitalist lords say this: we are not so rich as to buy cheap things. The better the machine tool or machine, the more expensive. Our association has been buying electronics from Western firms for twelve years now. They all, as a rule, give new digital program control systems (ChPU) after a year. It is not easy for us to attach each recurring model of a machine tool to a new electronic brain. After all, this causes additional expenditures and a mass of new documentation. We had somehow decided: this is a

transition year, let's put the former system on the machining center. We wrote a letter to the supplier: we told them the situation, and said, we will not buy your innovation from you at this time. What this started! The head of the firm immediately phoned Ivanovo. This, he says, is your right—to refuse. But I wish to inform you of one essential point. While the former system has a guaranteed time to first failure of ten months, for the new one it is three years. He convinced us that we should take the new system after all. In a word, a capitalist. Indeed, how can you help but agree, when some domestic systems have a guaranteed time to failure of 46 hours (!).

The priority of the purchaser's interests penetrates the entire work of our association. Unfortunately, the purchaser within the country does not always need anything new, you have to get him used to something new. The consumer within the country sometimes does not even suspect what miracles can be created on our equipment. We must open his eyes to it. I once happened to go into an engine-building plant. In one shop I saw almost a hundred gaugemakers, patiently catching microns on parts with very complex shapes. The work requires very high skill. I suggested to the management there: let us put in a machining center, and you will have no more grief. So they did. The story was similar at GAZ and ZIL. These enterprises sensed what a tremendous advantage the machining centers have, took the sketches from us and organized their own production of this equipment.

We broke the "rules of the game" by going out directly to the purchaser, by-passing a long chain of authorities. We suggest that the purchasers enter into cooperation with us, we seek and find new partners and new forms of collaboration. One day they realize that bold, nonstandard decisions are needed. This is how the idea came about—not by an order "from above," but by initiative "from below"—for the Soviet-Bulgarian Ivanovo-Sofiya Machine Tool Building Association. My work as director, and before, had mainly international ties, and now I devote almost the major part of my time to problems of collaboration. Not everything is coming together smoothly here: it is a new business.

In the very near future there will be dozens, hundreds of these international associations. The mass of the people come to us for experience. Others say: here we are, ordered to be friendly with a certain plant and a certain association. What do you advise: I answer: if you yourself do not know what to do, no one can teach you. No one can order: friends! You must know your partners by sight, know what you are going after and for what reason. An international association must have high goals and ideals. It is impossible to imagine an association producing primitive equipment. If, let us say, one makes one spade and another spade, then by combining them, they are nothing but a spade and can do nothing but be a spade. One must unite in order to storm unscaled heights.

Our experience in international cooperation was the topic for discussion at a meeting of the CPSU Central Committee Politburo. I sensed the great interest of the management of the country in the affairs of the Ivanovo Machine Tool Association. Mikhail Sergeyevich Gorbachev, listening to my report, asked many questions. It was an exhaustive and constructive analysis of the work of a form of economic integration new in principle. The integration made it possible to work out machine tools, unit-centers, abrasive machining centers, laser, woodworking machines or press-forms not specified by the plan. I am convinced that, on the basis of international socialist integration, we can make machine tools the like of which no one else in the world has ever made.

In order to create something new, one must be not only bold but also informed. Being informed about one's own sphere of activity is an extremely important thing. We have long understood this, and therefore do not utilize information that goes through bureaucratic channels. The mass of them in the country is made up of a bureau of technical information and institutes of the ministry. They somehow gather and circulate a mass of paper, but as a result, the innovation reaches us only 4-5 years later, when it has already grown obsolete and is needed by no one.

There is little sense in blaming anyone. There in the central offices there are simply no qualified people to select what we need. Therefore, we must rely only on ourselves. Each of our engineers and designers gets information through all accessible means and makes up his own file. You cannot get along without it and without a knowledge of at least one foreign language. They teach you what to do! This time has come. Otherwise you lag hopelessly behind. After all, no one assigns a translator to an ordinary designer whom we send overseas, let us say, to make up a delegation or to an exhibition.

Young people particularly flourish in an atmosphere of boldness and risk. They are immediately attuned to the new, because they have not yet been spoiled by the past, stagnant times. We entrust them with the most complex tasks. We support them, we help them, but we also ask them. I am proud of them. Take, let us say, the designer Pavel Bezgorodko. Shy, quiet, very young—those are the first things I saw in him. The fellow literally grew up before my eyes. Recently we appointed him chief designer of one of the most interesting projects. In general, we have a young collective. The average age of the designers is scarcely over thirty. I try not to put pressure on the young people. I am interested in how they stand up for their opinion, how they assert their point of view. In discussions with them, I myself gain fresh ideas. Training is reciprocal, or rather, mutually advantageous.

There is one more truth, of which I never tire of reminding our workers: a bold, unfettered idea can create miracles. Every person is talented, but sometimes even he himself does not suspect his abilities. There is

only one task: let them be revealed! For this, a person must be given an actual job to do, one in which he could independently create something from start to finish. Even then his abilities will perhaps not be revealed immediately. In a word, freedom for creativity is the first and main condition for a successful search. It seems to some newcomers that we have gathered select personnel. No, we have the most ordinary people.

I am referring to Aleksey Khomyakov. Right now, you look at him and he is really "select": a highly skilled construction electrician, a deputy of the RSFSR Supreme Soviet. In a word, a person known both in the collective and in the town. After all, we did not just "send for him" from outside, he grew up in the shop. He went from us, I remember, into the army, and after service he returned to us. We have more like him every day. The interrelation here is clear-cut: a deed is presented by the people, and the deed presents the people.

They often ask me: "What difficulties bother you most of all today?" What can you answer. The ones that we do not yet know. The most dangerous thing is to stop. To be self-satisfied. To think that everything has been achieved.

The second difficulty lies in the departments. Our ministry, for example. At the 19th Party Conference I expressed myself unequivocally concerning our Ministry of Machine Tool Industry—it is unnecessary. After my speech, many people came up to me and reproached me for my sharpness—they said, what a benefit there is from the ministry, people are still trying there and are making progress. All the same, I feel that ministries are the main braking force of progress. Because of them, even restructuring is not going as quickly as we could all wish.

I am, of course, far from thinking that all through the ministry offices there are enemies of the new, enemies of restructuring. No, in some ways they are likable people, and it is even possible to have a pleasant conversation with them sometimes. Unfortunately, however, in their views they look no farther than their own office desk for equipment and progress. Instructions of thirty years standing are more important for them than a million-ruble profit. A ministry worker tries to reduce life to some very simple schemes, and does not want to fit into any schemes. Each minute at a production facility there is a new situation, and if we seek a way out of the situation only in the ministry instructions, we will get nowhere.

I will give an example of this. We made a unique machine tool for a foreign firm. It proved so successful that at the firm they sent a delegation to our machine tool, and showed that the most precise machine tool at the enterprise—was made by the Russians! Unfortunately, for us so far we have a name, but a reputation is worth practically nothing. Overseas the authority is money. But I have nothing against this. The point is that the director of the firm himself came to us in Ivanovo for this machine tool. What kind of a person is he? Could he not, as they say, get it through the "mail"? Or send one of his colleagues? He came not in order to be convinced that the machine tool was manufactured with high quality, but to see the conditions under which the machine tool was made, and the overall level of our workers' qualifications. He does understand that you do not make precise equipment in the mud.

Our shops, of course, are clean and orderly. This is just what displeases another inspector. For example, a ministry inspector for nonferrous metal came here. He poked his nose in everywhere and shook out all the papers. You do not treat nonferrous metals well, he said, the floors over there are covered with aluminum. I ask: do we have an overexpenditure of aluminum? No, he replied, but all the same, it was not suggested that aluminum floors be laid. How could we prove to him that it is impossible to assemble very fine machining centers on iron floors.

Sometimes the ministry workers are interested in some sort of details, in trifles. They cannot see the overall picture and do not want to see it, even though in words they look after state interests. Somehow, though, the more words they utter, the farther we lag behind the developed countries of the West. The ministry and centralized administration—this is my sore subject, I could talk about it for a long time. It seems to me, however, that more and more people are coming to the conclusion that the departmental system of administration has outlived its time. It has outlived it—forever. If we wish to move ahead, we should renounce it. We must work for the future. Right now talk often turns to laser machine tools. I am convinced that if we do not become widely involved with them right now, we will soon lag behind even more. Press-forms are a simple thing of this type. It takes months to design and manufacture them. These parts could be prepared by a laser in five minutes.

The struggle for technical progress is not in vain. This is a victory over both technology and ourselves. "It will do well as it is"—is one of the formulas of stagnation. It justifies everything in the world, and as a result, hack-work replaces reliability and indifference—responsibility. Everything is farmed out at random, and leads to the degeneration of ideas in general. After all, it is not easy for the director who puts out the goods that make the consumer's teeth ache. Although it is possible that he spends no less nervous energy than I do. After all, he suffers from the imperfection of the system and also rages from impotence. The main thing—the actual business—gives him no warmth.

Right now, of course, it is much easier to be a manager than before. The director has more independence. I, for example, as general director, am given the right to purchase equipment abroad using the firm's currency. We can use thirty percent of the currency funds obtained for the machine tools sold at our own discretion. So the

funds must be earned, in order not to ask Gosplan or the ministry for them. At the same time, they must be spent so as to multiply considerably.

All the same, even today there are many, even too many cowardly managers. We all think that someone will come and take the brakes off restructuring. No, we are the ones who should do this. Restructuring is going slowly because we can in no way rid ourselves of the habit instilled in us for decades of doing only what they tell us from above. Otherwise how do you explain the fact that we are passing finished sketches to different plants, and the new equipment there is taking years to develop. We even train our own workers, but there is no business. How do you explain this? Inability? In my opinion, it is lack of desire. Or lack of understanding of the tasks facing society.

When you think about all this, when each day you see around you happy, creative, productive people, you cannot help but ask yourself: why has the experience of our association remained, essentially, without broad support? Evidently, we still have too many administrators and managers waiting for instructions, living according to the principle: don't overdo it. This was an incentive yesterday, but today.... Today it is time for boldness, risk and innovation.

PRODUCTION

Need for Flexibility in Machine-Building Enterprises Stressed

18230024 Moscow PLANOVOYE KHOZYAYSTVO in Russian No 11, Nov 88 pp 69-76

[Article by Candidate of Economic Sciences V. Kotlov under the rubric "Scientific and Technological Progress": "Enhancing the Flexibility of Machine Building"]

[Text] Scientific and technological progress is fundamentally altering the situation in machine building. In the first place, the range of products is expanding. It has increased by over 20,000 items for machine building as a whole over the past 20 years. In certain branches the number of type-sizes of the machines and equipment produced doubles or triples on the average approximately every 10 years. In order to maintain our position in the world market in passenger car production, for example, it is necessary to master the production of at least one new vehicle model and modernize two every year. As a result, machine-tool building alone, which is not fully meeting the needs of the clients by far, produces more than 10,300 type-sizes and models of standard, specialized and general-purpose machine tools, machines and other equipment. The electrical equipment industry produces more than 80,000 items.

The time it takes machine-building products to become obsolete is cut in half on the average every 20-25 years. While it was 35-50 years during the first decade of the century, it had dropped to 7-9 years in many equipment branches by the mid-80s and to 3-4 years for science-intensive products. The replacement of entire generations of machinery and equipment is accelerating as a result. It occurs every 8-12 years in the rapidly developing branches of machine building and every 15-20 years in others. This is accelerating rates of renewal of the list of products. They have increased almost 2.5-fold for machine building as a whole during the past 20 years. The list of products changes entirely every 5-7 years in machine-tool building. The average annual rate of renewal of the list of machine-building products could reach 30 percent by the end of the century.

The complexity of the products is also increasing. The number of parts of certain large, modern machines and assemblies is measured in the hundreds of thousands. A turbine for an AES with a capacity of 1 million kilowatts contains more than 270,000 parts, for example. They number in the billions for machine building as a whole. The list of narrowly specialized types of equipment for a limited range of consumers is growing.

The specific portion of mass-produced, small-series and individual-item production is increasing as a result of these factors and has presently reached 75-80 percent. The structure of mass production is also changing. While previously it was almost synonymous with the production of a limited list of standardized products, it is now turning into an industry of individualized mass production conforming to the diverse demands of the clients.

All of this is increasing the demand for expanding machine building's capabilities. It is their limitation which is holding up the adoption of progressive scientific and technological developments. Many enterprises are not in a position rapidly to retool for the production of new items or to provide the level of manufacturing precision and quality required for the new products. The Moscow Machine-Building Plant imeni M.I. Kalinin, for example, has the technical capability to produce no more than five different sizes of hydraulic pumps and motors; the Perm Electrical Equipment Plant has difficulty producing 300 types of low-power fans and motors; and most of the motor-vehicle plants have difficulty mastering the manufacture of one model in a five-year period.

It is apparent that production capacities cannot be enlarged in machine building merely by further intensifying product specialization at the enterprises. The amount of time required to design and build a product can be far greater than its life cycle. In addition, the production volume will not necessarily measure up to the required effectiveness for capital investments. The branch's practice of resolving the problem by sporadically retooling enterprises involves significant investments of funds and losses of time, as a result of which the national economy loses billions of rubles in profits, and positions are lost in the foreign markets. In order to switch to production of the T-130 tractor, for example, the Chelyabinsk Tractor Plant had to retool at a cost of

500 million rubles, to place 300,000 square meters of [new] production area into use and to replace a significant part of the equipment and production gear. Replacement of the base model at AvtoVAZ will require replacing a third of the production equipment at a cost of around 150 million rubles. Furthermore, the smaller the list of items manufactured at an enterprise and the greater their production volume, the higher the cost of readying the production facility to begin producing new products.

The reserve capacities specified in recent years in certain machine-building branches are also incapable of contributing to the acceleration of product renewal. Without these capacities the economy has a great deal of inertia in general, but they are extremely small. According to an expert assessment made by specialists with the Ministry of Electrical Equipment Industry, for example, reserve capacities should equal 4 percent when new products account for up to 20 percent [of the total]; 6 percent when up to 30; and 8 percent when up to 40. In this case the commercial output load on the capacities would be 96, 94 and 92 percent respectively. The objectivity of these conclusions is not confirmed by branch experience, however, since the average load on its enterprise capacities did not exceed 91-93 percent during the 11th five-year period, while the specific portion of items produced for the first time did not go above 2.5 percent. The main thing, however, is that the reserve capacities can contribute to the mastery of new products only within the limits of the production operation's flexibility and cannot compensate for a deficiency of the latter.

At the same time, renewal of the product list is essential for a modern production operation always prepared, rapidly and without a loss, to halt the production of old items for which demand has dropped and to begin rapidly producing in any quantity batches of new items with the improved consumer qualities demanded. Acceleration of the rate of production renewal therefore requires enhancing the flexibility of operating machine-building enterprises by means of reconstruction and retooling.

The main economic impact of enhanced flexibility is that it entails a drastic change in the organizational and economic functioning of the management elements. In addition to accomplishing tasks involved in scientific and technological progress, enhancing flexibility also helps to better link the production capacities of related enterprises, saves on live and embodied labor in the process of meeting the clients' demand and is of great social importance. This, in turn, requires resolving a number of methodological matters having to do with defining the concept of production flexibility, methods of assessing it and ways to enhance it.

At the present time the flexibility of production systems is linked mainly to expansion of the list of items produced. The conditions for the functioning of enterprises are considerably more extensive, however. As the traditional raw materials base shrinks, for example, synthetic materials are increasingly being used. The use of article and parts made of industrial ceramic increased by a factor of 5.5 in the machine-building complex just during the first 2 years of the 11th five-year period, and the use of composite materials increased to 39,600 tons in 1987. The economic situation of the enterprises is changing as a result of the expanding economic independence of the consumers and their own conversion to complete economic accountability, whereby they are influenced most by the volume and structure of consumer demand. In the situation of scientific and technological progress the demand for adaptation to changing situations of economic functioning is moving to the fore and beginning to replace the previous relative stability of the production systems. Production flexibility should therefore be taken as its ability to switch from one efficient functional status to another without needing a fundamental change in the material and technical base to satisfy the client's current demands.

Production flexibility has to be assessed in order to adjust it in the practical functioning of the enterprises. Two groups of indices—relative and absolute—are presently used for this purpose. The relative indices are most frequently expressed as coefficients of flexibility or universality. These are convenient for comparing systems and forecasting trends in their development. At the same time, the use of these indices as the first and absolute condition makes it necessary to establish the criterion or the maximum value of flexibility, defining which involves practically insoluble difficulties. The main deficiency of the relative indices, however, lies in the fact that they do not reveal the actual range of production flexibility either in types of products which the economic system is capable of producing or in the list of materials processed, and so forth.

Such indices as the extent of the list of parts processed and items produced, the time required for the system to convert from one functional status to another or from the production of one type of product to another, and so forth, have come to be used as absolute indices of production flexibility. We know that the ALP-3-1 production line can machine 25 different kinds of casing parts and the ALP-3-2 can machine 70, and they require no more than 20 seconds to convert to machining a different range of parts; Leningrad's flexible machine system for the production of induction coil is capable of producing 52 different spools in eight technological groups, requiring 0.5-2 minutes for resetting from one group to another during a shift and no more than 2 minutes for switching within a group; the automated section for the production of machine tools with numerical control at the Leningrad Electric Locomotive Plant can produce 300 different parts, and so forth.

These indices are useful and have their field of application. The range of products does not tell one what specific products the production system is capable of

producing, however, or of what materials. The same is true of the informational significance of the indicator of time required for resetting or readjusting the system. Furthermore, the indicator's value will change when compared with the duration of the production cycle.

It would seem that the flexibility indices for a machine-building enterprise should graphically reflect its production capacities in order, in the first place, to make it possible to precisely outline the area of functioning of the economic component and to define its place in the branch. In this case the flexibility indices could also serve as an objective foundation for distributing state orders on a competitive basis, not just within ministries but within the entire sector. In the second place, a comparison of forecast data on trends in the development of the structural and technological features of products and structural materials with the flexibility of the production capability expressed in this manner would make it possible to determine periods required for modernizing the enterprises based on this most important feature. This is practically not done at the present time, as a result of which machine building is losing its position as the main investor in the domestic market and as a reliable and efficient partner in the foreign market.

Production flexibility is a concrete feature, since it is tied to the objective capabilities of the production system and to measurable product parameters. It should therefore always be assessed in absolute terms. In addition, production flexibility indices must reflect the specific parameters of items which the economic system is capable of producing with a specific group of starting materials.

The range of parameters leads one to the conclusion that flexibility cannot be measured with one integral indicator alone. Its assessment requires a system of indices, each of which evaluates one aspect (feature) of the object of focus of the enterprise's capability. In the contemporary economic situation it is obviously necessary to single out the capability of a production system for reacting to changes in the parameters of the basic raw and processed materials, to changes in the structural and technological features of the product and its production volumes. The size of consumer demand in numerical terms mainly determines the required level of use of the production capability and its scale, and has an indirect influence upon flexibility. At the same time, the specific features of the product and of the materials set the main demand made of the production system's mobility.

Proceeding from this concept, one can propose the following system of indices for assessing flexibility of machine-building enterprises. In a production process oriented toward the consumer, the product has the determining role in the reciprocal adaptability of the production capability and the product. The first group of flexibility indices must therefore embrace the most important structural and technological parameters of the products, those determining the possibility of manufacturing them in the specific economic unit. These parameters include size, weight, type of surface, and group or class of product complexity.

On the one hand, they fully describe the structural and technological features of the machine-building product and, consequently, most of them are reflected in the branch classifiers of products and in the classifiers of parts and assemblies in general machine-building use. On the other hand, these parameters are the basis of the features of the vast majority of production equipment at machine-building enterprises and are also reflected in the classifiers of machine tools and machines. These parameters therefore provide the basis for integrating equipment and products in the production systems. Among other things, the structure of the machine-tool pool, particularly the machine tools with a functional purpose, is determined mainly by the structure of the surfaces machined and their precision with respect to dimensions.

Another group of flexibility indices should assess the ability of a machine-building enterprise's production potential to adapt to different types of materials. It reflects the features of the technologies used and of the machine-tool pool, and the level of professional training of the production personnel. Along with this, in the situation of accelerating rates of scientific and technological progress, the structure and the specific features of the materials used determine possibilities for the practical application of new engineering ideas in many cases. The use of aluminum, titanium, ceramic, plastic, amorphous and composite materials, and so forth, in the structures of the machines and equipment produced makes them more effective by reducing their weight, enhancing their strength, their corrosion- and vibration-resistance, and other features. Assessing the flexibility of machine-building enterprises from the standpoint of the materials used therefore indicates not only their capabilities for using new structural materials which are more economical and effective with respect to the labor, energy and capital components of production, but also their possibilities for greatly improving product quality on this basis.

At the present time machine-building plants are poorly oriented toward this way of expanding their production capabilities. Today, for example, electronics and instrument-making use one twentieth the amount of industrial plastic essential for their development used by similar branches in the USA. The absolute level of use of industrial ceramics in the branch is extremely low. Composite materials are used only in aircraft construction, and then only in limited quantities. Amorphous materials are practically not used at all. The materials production system bears much of the blame for this. However, the machine builders themselves are hampering increased use of progressive materials by focusing

mainly on ferrous metals in their orders. This is obviously caused by the inability of machine-building enterprises to use effective materials. Reflecting in the assessment of an industry's flexibility its ability to adapt with respect to structural materials should therefore increase attention to this function of the production capability.

I feel that this aspect of production flexibility could be defined with indices assessing its ability to subject different groups of structural materials to various types of machining. Since each type of structural material is ordinarily subjected to various machining methods in the process of manufacturing machines and equipment, a list of materials from which the enterprise produces items using all types of processing could fully be used as the indicator of production flexibility with respect to materials.

These enterprise parameters indicate the range of flexibility of its production capability. Comparing them with similar parameters for the product to be manufactured shows how flexible it is with respect to the given type of products.

Flexibility for a machine-building enterprise involves the technical, technological, organizational and economic aspects of the production system, and it is achieved through a comprehensive process. We know that any complex system has qualities which are not always a part of each of its components. Enhancing production flexibility therefore consists primarily in seeking the best combination of all its components. This is confirmed, among other things, by experience in adopting flexible automated production processes. For example, their effective functioning has required enlarging the use of concomitant technologies; establishing a system of production and labor organization and control adequate to the needs of the flexible machine systems; and increasing the number of highly skilled programmers, production process engineers, designers, planners and other specialists.

At the same time, the special-purpose features of an enterprise's production capability as a system predetermine the strategy for the use of its components in enhancing flexibility. It takes into account the fact that the production capability can only be flexible when each of its components is flexible. Otherwise, the latter are eliminated from the process of producing a new item and, consequently, production is disrupted.

And so, from the standpoint of the system's structure the enhancement of production flexibility consists in achieving a state in which either one and the same product can be manufactured with various correlations of components or various products can be obtained with the same components. The flexibility of a machine-building enterprise is therefore defined by the flexibility of its structural capability and of its components.

An enterprise's production capability includes components with different degrees of flexibility or universality. For this reason production flexibility can be enhanced by increasing in its structure the portion of the components most neutral with respect to the product and the materials used. The technology and organization of production, labor and control are among the leading ones.

Machine building today has an adequately large range of technologies neutral with respect to many production factors. Welding processes, for example, have practically unlimited capabilities for producing various types of machine parts and assemblies. Magneto-thermal machining can produce semifinished products with the most complex shapes, even to the point of altering their microstructure. Galvanic and thermal processes, hydroburnishing, electrochemical polishing and turbogrinding have no limitations with respect to the size or configuration of the parts they can machine. An extremely broad range of items can also be produced by tapered cross (poperechno-klinovaya) rolling. A large range of machining operations can be performed with light rays and high-pressure water jets with the Ingersoll-Rand system, and with laser beams.

A number of technologies have a high degree of neutrality toward the materials machined. Needle-milling can be used on nonferrous metals, iron, alloy steels, wood, plastic and rubber, for example; glass, plastic, fiberglass and titanium can be worked with a high-pressure water jet; ceramics, refractory alloys and the like can be worked with light beams; stone, ceramics and refractory alloys can be worked with electron beams. Laser technology can be used for machining iron, steel, aluminum, titanium and other metals, composite and dielectric materials, heat-resistant and other alloys.

At the same time, the technology determines how production's human and material components are linked, as well as all of the spatial and temporal linkages between the material components and the production stages. That is to say, it also has a great integrating capacity. Such technologies include, among others, single-stage or limited-operations and gang technologies. For example, adoption of the latter at the Tiraspol Diecasting Machine Plant imeni S.M. Kirov reduced the time required to produce new equipment by a factor of 2.5. The use of gang technologies at the Salavatneftemash production association made it possible to set up a flexible production operation with modern equipment. Enhancing the flexibility of enterprises therefore primarily involves the widespread employment of these production processes.

The organization of production, labor and management contains great possibilities for enhancing the flexibility of production systems. This is because of the vast range of its influence on the other elements of the production potential, which embraces planning, the organization of production operations, labor incentives, the improvement of management's organizational structures, and so forth.

Progressive forms of production, labor and management organization provide for the most efficient combination of all the other components of the production potential, for maintaining optimal relations and balance among them, which contribute to the achievement of the economic system's common goal. And so, production, labor and management organization enhances the flexibility of a machine-building enterprise not just with its own flexibility, as do the other components, but also with its system-shaping effect upon the latter.

In the opinion of many Soviet and foreign specialists, the combining of modern technology with progressive production organization, reinforced with management using electronic computers, is the foundation for enhancing the flexibility of enterprise production capability. This is why as early as 1972 U.S. industry was using around 123,000 programs for improving production organization, which were based on the theory of "labor enrichment" and "organizational development" and whose objectives were the shaping of a focus on active labor in the personnel, the cooperative accomplishment of production tasks and the development of innovative processes.

At the same time, in Soviet machine building **many achievements of the Soviet school of scientific organization of production, labor and management have been thoroughly forgotten or have come to naught in recent years**. As a result, the growth of productivity accomplished by implementing labor organization projects averaged only 5 percent for the group of machine-building branches during the 11th five-year period. The ignoring of needed projects or the lack thereof for organizing production, labor and management resulted in failure to adopt a GPS[flexible production system?] at the Zhalgiris Machine-Tool Plant in Vilnius. Sociological studies have shown that due to deficiencies in the organization of production only one third of those employed in industry are working at full capacity.

Modern trends in the development of the machine-tool pool show that machine tools with numerical control, multiple-operation machine tools like the "machining center" and industrial robots are the most promising equipment from the standpoint of flexibility. Furthermore, the production capabilities of the machine tools depends to a significant degree upon the number of tools installed on them. A unit produced by the Triumph company, for example, can cut, stamp or bend parts of various shapes out of steel and sheet plastic by using lasers, vibration shears and dies. It takes 1.3 to 1.7 times less time to produce the same parts at machining centers (with multiple tools) than it takes to produce the same parts on single-operation machine tools which use only one type of tools.

As the level of automation increases equipment flexibility increasingly depends upon improving the control systems, since they determine the number of blocks, assemblies and machines which have to be efficiently and rapidly rearranged (readjusted), and in complex machine systems like the flexible machine systems and the GPSs, also the possibility of redistributing production functions among their components. The control systems of adjustable automatic lines, for example, make it possible to process only 2-4 different parts of similar design, size and production route. Many Japanese flexible machine systems are considerably more flexible than similar systems in the USA and the nations of Western Europe, since they perform production operations with operational resetting of 400 components, while the figure is only 100 in the USA and 10 in Western Europe. They can therefore be effectively used also in small-scale production. In our machine-building industry specialists of the Novosibirsk Electrotechnical Institute and the Special Design and Technological Office of the Tyazhstankogidropress association have built a system with numerical control, the UNIKOM-20, which has 20 coordinates and can be used for processing parts with practically any degree of complexity.

The extensive use of control systems based on microelectronics has considerably enhanced the multifunctional capacity of industrial robots. They have far broader flexibility than machine tools with numerical control. The Betta universal industrial robots produced by AvtoVAZ, for example, can be used for precision welding, assembly, for trimming cast items, applying coatings, monitoring geometric parameters, loading and unloading, and transport operations. Robots are already capable of performing up to 7 million operations—that is, around a third of all the operations performed in industry. The portion could increase to 65-75 percent within the near future. The flexibility of industrial robots is mainly determined by their lifting capacity, their degree of mobility, number of position points and memory capacity.

The features of machine tools still depend upon the structural parameters of the items produced, however. Installing attachments and special production rigging therefore helps to increase their flexibility.

The modern, complex, "highly intelligent" equipment of machine-building enterprises is gradually distancing production personnel from the materials being processed and the products manufactured from them. Because of this there is occurring a relative increase in the specific portion of workers engaged in routine loading operations, and new types of occupations and specialties are emerging, on the other, which involve mainly managerial functions. As a result, Enhancing the professional skill of the workers is seen as the main way to enlarge their capabilities.

Because of the specific features of modern machine building, the main objective of professional and advanced training must be that of increasing the work force's versatility in the labor process. This requires the

establishment of a system of flexible professional training permitting workers easily to adapt to the new working conditions. Such training includes providing a solid foundation of knowledge of the design and the operating principles of the modern equipment, the nature of the production processes, and so forth, as well as the development of such basic skills as a capacity for analytical thinking, creativity and independence of action. Enhancing the versatility of the work force in the labor process also requires a readiness to train constantly, an increased sense of responsibility and development of the ability to cooperate.

The creation of normal working conditions is another direction for enlarging the capabilities of production personnel. Because of a lack of these, in the opinion of practical workers, no more than 80 percent of the potential of the workers and only 20 percent of the potential of engineers is utilized at many plants today. The process of making the work more efficient must also provide for prompt and efficient change and a high level of self-organizations.

AUTOMATION, AUTOMATED SYSTEMS

Machinebuilding Automation Conference Reported

18230029 Moscow MEKHANIZATSIYA I AVTOMATIZATSIYA PROIZVODSTVA in Russian No 12, Dec 88 pp 37-38

[Article by Candidate of Technical Sciences I.G. Botez under the rubric "Conferences and Meetings": "Problems in the Comprehensive Automation of Production in Machine Building"]

[Text] The All-Union Scientific and Technical Conference "Problems in the Comprehensive Automation of Production in Machine Building" was held at the Yerevan Polytechnical Institute imeni K. Marx on 8-9 Jul 88.

Taking part in the conference were specialists from production associations and enterprises of many sectors of industry.

The paper of Doctor of Technical Sciences B.I. Cherpakov (ENIMS [Experimental Scientific Research Institute of Metal-Cutting Machine Tools]), "Strategy of Comprehensive Automation of Production in Machine Building Today," noted that the transition from individual machinery to the production and operation of developed systems of automatic-action machinery based on the principle of "systemic integration" is acquiring decisive significance of late. This process has taken on a stable and steady nature in world and domestic practice.

The development of concepts making it possible to establish the promising realm of the efficient application of equipment with varying levels of automation is essential in light of the tasks being faced.

The basic and fundamental principles that should be at the heart of the concepts of the development of automation in machine-building production are being formulated as follows: providing for the assigned growth rates of product volume in machine building and metalworking; stability of labor resources; and, economy of state funds with a rise in the technical level of automated equipment.

Among the basic conception and conditions for its realization should be singled out raising the efficiency of production, improving the infrastructure of machine-building production and raising the organizational and technical level of machine-building enterprises.

The paper "Concepts of the Development of Flexible Production Systems" [FPS] by Candidate of Technical Sciences D.Ye. Gindin (ENIMS) noted that the following properties of FPSs are taking on paramount significance in domestic machine building: the possibility of organizing the comprehensive output of products with the minimal utilization of equipment, labor resources and production space; and, an ability for periodic product replacement and renewal with minimal expenditures of funds and time.

Experience in creating and operating domestic and foreign FPSs has shown that their advantages are manifest with the observance of the following conditions: strict technical and economic substantiation of the creation of the FPS at a specific enterprise performed jointly by the designer and the customer. An evaluation of the efficiency of the creation of the system should be of a comprehensive nature, including a regard for the national-economic impact of the output of the end product; the organizational and technological preparation of enterprises, including the training of personnel as system technicians and specialists in the realm of FPS design and operation; progressive technological processes and equipment should be placed at the foundation of the creation of an FPS; the creation of an FPS should be accomplished in production areas, decisive in production and technological regards, that provide for the output of finished sets of equipment or assemblies for it, as well as an organic interconnection with allied production subdivisions; the FPS should be based on the broad standardization of individual components and modular principles for the building of FPSs and should envisage the possibility of the stage-by-stage placement of phases into operation and increases in their production capacity with the compulsory efficiency of each phase separately; and, equipment and systems with a high degree of reliability should be utilized in the construction of an FPS.

The type of production to be automated is decisive among the conditions of the client enterprise that must be taken into account in creating an FPS.

The paper "Purposeful Synthesis of an Optimal FPS" by Candidate of Technical Sciences A.V. Kotov (Kursk Polytechnical Institute) considered the purposeful synthesis of the optimal FPS in which the design consists of the stages of economic, technical and design substantiation of the FPS version. The technical and economic solutions for the functioning of the flexible system being planned are formulated at the first stage. Organizational (structural and parametric) decisions on the building of the production process in the FPS are made in the second stage. The third stage has the specific technical decisions regarding the design and layout of the FPS overall and for each of its subsystems in particular.

Planning proceeds in the following areas: the required economic indicators are set (impact, cost, capital investment and the like); the required indicators of the flexibility of productivity, reliability, precision, number of support personnel and the like are set through coefficients for raising productivity, automation, waste reduction and the like; then, having a complete range of substantiated technical specifications, all of the mechanisms and subsystems of the FPS are selected or newly designed that would ensure the fulfillment of these requirements and guarantee the achievement of a set economic impact.

Much depends on the correctly established structure of the FPS in the second stage of the design. The search for optimal versions is conducted as follows: a narrow realm of versions of structures close to the optimal is first determined in extensive fashion using the technique developed and statistical data on existing FPSs; the task of the problem after the determination of structural versions is optimization according to the criteria for ensuring the assigned productivity of the technical system with the least spending.

One of the most efficient methods for solving this problem is the imitative-modeling method. The realization of this method is accomplished with the aid of a computer random-number generator. The variable parameters of the structure are the speed of movement of the industrial robots, the number of them, the number of positions supported by one robot, the reliability of the elements of the technical system, the number of parallel workflows, the capacity of the transport and holding elements, the cycle of operations of individual positions and the like.

The technique being proposed was tested in the Iskra-226 and Iskra-1256 microcomputers. The principles of purposeful synthesis that were developed are being employed in planning FPSs for machine- and instrument-building enterprises.

The paper of L.M. Safronov of the Assembly Mechanisms NPO [Scientific-Production Association] (Pavlodar) titled "The Creation of an FPS and Modules for Product Assembly" noted that the creation and incorporation of 13 FPSs for seven plants in the sector is envisaged by the comprehensive program for the creation and incorporation of FPSs in transport and agricultural machine building for 1987-90.

The creation of a whole range of flexible modules for their configuration is an important direction of work in realizing the program for the creation of FPSs, RPCs [robotized process complexes] and RPLs [robotized process lines]. The Mekhinstrument, Ritm and Pribor NPOs have created and tested a mockup of a transport module with automatic addressing of auxiliaries according to set programs for the assembly of items of up to 20 kg [kilograms]. The basic assemblies of a flexible transportation module for the assembly of items up to 200 kg have been developed, manufactured and installed. Work on creating standard flexible production modules for the assembly of items with negative allowance began this year.

Work began in 1988 on creating a whole range of flexible modules for the assembly of threaded joints using the standardized power drives created by the Mekhinstrument NPO and flexible modules for the lubrication of parts and the refill of oil in the assemblies and units during assembly, as well as flexible modules for pumping up tires.

The paper "Ways of Improving FPSs in Mechanical Machining" by Doctor of Technical Sciences A.I. Fedotov (Leningrad Polytechnical Institute) noted that the tasks of intensifying production should be resolved through raising machining conditions, automating the processes of machining of the preparation of production, the widespread incorporation of the most progressive tooling materials and designs, raising the precision and quality of items and the like.

It is assumed that by 1990 some 25 percent of existing machine tools with NC [numerical control] will be linked to a central computer and that 15 percent of new NC machine tools will be built into automatic systems with control from a single computer; 20 percent of the cost of the new production will go for devices for the automatic manipulation of parts and tooling; 60 percent of new NC machine tools will not use paper tape as the programming medium; and, 50 percent of the programs for parts manufacture will be set up on modeling devices. The expansion of computer control will make it possible to transmit data on parts along communications lines, which will lead to a reduction of 25 percent in drawing documentation. The production of computer-controlled NC machine tools will reach 50 percent of all machine tools.

A section or line consisting of modules possesses the greatest flexibility, but the cost of such an FPS increases by roughly 20 percent. Analysis of FPSs shows that a section of 4-7 NC machine tools with a combined set of equipment is typical of 65 percent of the cases, sections

with NC machine tools supplementing each other and specializing in individual technological operations comprise 25 percent and sections from flexible modules are 10 percent.

The successful operation of an FPS is impossible without a marked rise in the reliability indicators of the individual elements and the system overall. The FPS can be self-supporting only when operating in unattended mode over the course of 2-3 shifts, which cannot be fulfilled in practice in the majority of cases today. The NC systems are the least reliable. Analysis of the failures of the hydraulic, mechanical and electrical portions of the equipment shows that they average about 15, 20 and 65 percent respectively. The time for detecting and eliminating defects is often many times different therein.

The paper of engineer V.K. Odintsov of the ANITIM [Altay Scientific Research, Planning and Technological Institute of Machinery Manufacture] NPO (Barnaul), "The Development of an FPS for Welding Production," noted that a flexible system consisting of welding-process modules, assembly and monitoring modules and a transport and holding system has been developed for automating the assembly and welding of the base of the standardized cab of the Belarus tractor.

The principle of parallel operation of all system elements, as well as the concentration of technological operations in a single workstation (in the module), was placed at the heart of the development.

Two robots are installed on a gantry and perform the welding of one item simultaneously.

The collision of the robots in the work zone is averted via apparatus and program means. The robots move along the welding-production gantry, which makes it possible to combine the time for robot operation and transport operations. The arcing time and the utilization factor of the robots are both increased thereby.

The FPS structure is executed with a high degree of standardization. The FPS control system is intended for the performance of the tasks of scheduling, FPS production-equipment control and the collection and presentation of information on production and the operation of the equipment.

The paper "An FAS for the Turning of Precision Parts of Instruments" by engineer Yu.A. Lukyanov (Saratov) noted that a flexible automated section (FAS) has been created for the lathe turning of precision parts of instruments of the terminal connector, magnetic circuit, etc. type consisting of six FPMs [flexible production modules], an ATSS [automated transportation and storage system] and a computer control system (CCS).

The FPS provides for the fine machining of parts of the rotating-body type with diameters of 4 to 60 mm, lengths of 4 to 40 mm, a precision factor of 6-7 and a surface smoothness *Ra* of from 3.2 to 1.25 from corrosion-resistant, structural, light magnetic and non-ferrous alloys.

The FPMs in the FPS were created on the basis of model TPK-125VRM series-production machine tools equipped with model K60.680 NC systems, dual-gripper handling robots, precision-control systems and pulse-timed lubrication systems.

The ATSS includes a control system based on the Elektronika-60 computer, an overhead transport robot and dual-position holders alongside. The lift capacity of the transport robot is 25 kg, and the positioning precision is plus or minus 2 mm.

The paper of engineer D.I. Chernyy, "A Flexible Robotized Complex for the Assembly of Parts," indicated that a flexible RPS for the assembly of radiator caps has been developed and incorporated at the Radiator PO [Production Association] (Orenburg) in conjunction with the Robot Technology Center of the MVTU [Moscow Higher Technical School] imeni Bauman (Moscow).

One important distinction of this system from those utilized earlier is the presence of televised viewing, making it possible to monitor the quality of the parts being used in the assembly process and to perform the stage-by-stage monitoring of the correctness of assembly. The utilization of this system with a computer makes it possible to impart to it qualities of adaptability and allows the automation of the rejection process for unsuitable parts. The resolution of the question of automating the assembly process assumes a consideration of a wide range of questions connected with the requirements made of tooling and attachments and the disposition of assembly workstations.

The technical-viewing system provides for the reception of depictions of the assembly working zone being monitored and the preliminary processing of information.

Monitoring is conducted by television camera located over the work zone for assembly of the item. One feature of the process-viewing system is the presence of buffer memory that provides for the asynchronous principle of information transmission. The exchange of information between the buffer memory and the working memory of the control computer is accomplished along computer programming channels utilizing the user interface intended for connecting external user devices to the computer and the additional integral systems and discrete elements installed on it.

The system also envisages devices for the ejection of finished products and the storage of rejects according to the results of stage-by-stage monitoring. The parts are ejected and the assembly process is halted in the event of the impossibility of further continuing the assembly.

The control function in this RPS is performed by an Elektronika-60M computer installed on the frame of the UKM-772 throughout the course of the technological process.

The incorporation of a flexible RPS assembly complex for the automatic assembly of the caps has the capability of rapid resetting and the utilization of original assembly modules and raises productivity by 2-3 times. The economic impact of the incorporation was 45,000 rubles.

The paper "Microprocessor Control of the ATSS of an FPS" by engineer M.F. Smirnyy (Voroshilovgrad Machine-Building Plant) considered an FPS consisting of four materials-handling devices, four process machine-tool modules (PMM) and two monitoring and reject positions, as well as a table for the feed of finished product, a hopper for rejects and a storage area for finished parts and blanks.

The principal element of the ATSS is a means of transport (a gantry robot) intended for moving the parts or blanks between the FPS positions and a manipulator mounted on it performing the functions of loading and unloading in the working zone. The gantry robot moves in two mutually perpendicular directions. The direction of movement and its magnitude are determined by the control system depending on the situation prevailing at the moment. The manipulator has a fixed program of movements and performs the cycle "take part" and "place part."

The information portion of the ATSS control system consists of sensors for position and monitoring. The positioning of the transport equipment is accomplished using modular magnetic sensors making it possible to distinguish the direction of movement and precise stoppages at the required point.

The monitoring of the presence of parts in the positions is accomplished by electrical-contact sensors. The signal of the completion of machining and monitoring of parts is realized by fixed logic circuitry in the memory. Information on the state of storage is entered in the memory of the control device.

Initial information on the state of blanks and parts storage and the mix of parts to be machined enters the microprocessor system from a higher-order computer or from the operator's panel at the beginning of FPS operation.

The control system operates by request, which can arrive from the positions of machining, monitoring or item rejection. After the activation and entry of the initial information, the system switches to waiting mode. After receipt of the interrupt signal, the system performs a determination of the object issuing the inquiry and fulfills the support program. The system then returns to the waiting mode until the receipt of the next interrupt.

The control system performs operations in cataloging storage, preparing control information for the control system for the drive mechanisms of the transport equipment and verifying the performance of the assigned tasks.

The All-Union Scientific and Technical Conference adopted recommendations aimed at further raising the organizational and technical level and accelerating the creation and incorporation of equipment for the comprehensive automation of production processes at machine-building enterprises.

10

22161
187
NTIS
ATTN: PROCESS 103
5285 PORT ROYAL RD
SPRINGFIELD, VA 22161

Foreign Broadcast Information Service (FBIS) and Joint Publications Research Service (JPRS) publications contain political, economic, military, and sociological news, commentary, and other information, as well as scientific and technical data and reports. All information has been obtained from foreign radio and television broadcasts, news agency transmissions, newspapers, books, and periodicals. Items generally are processed from the first or best available source; it should not be inferred that they have been disseminated only in the medium, in the language, or to the area indicated. Items from foreign language sources are translated; those from English-language sources are transcribed, with personal and place names rendered in accordance with FBIS transliteration style.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by FBIS/JPRS. Processing indicators such as [Text] or [Excerpts] in the first line of each item indicate how the information was processed from the original. Unfamiliar names rendered phonetically are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear from the original source but have been supplied as appropriate to the context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by the source. Passages in boldface or italics are as published.

SUBSCRIPTION/PROCUREMENT INFORMATION

The FBIS DAILY REPORT contains current news and information and is published Monday through Friday in eight volumes: China, East Europe, Soviet Union, East Asia, Near East & South Asia, Sub-Saharan Africa, Latin America, and West Europe. Supplements to the DAILY REPORTs may also be available periodically and will be distributed to regular DAILY REPORT subscribers. JPRS publications, which include approximately 50 regional, worldwide, and topical reports, generally contain less time-sensitive information and are published periodically.

Current DAILY REPORTs and JPRS publications are listed in *Government Reports Announcements* issued semimonthly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161 and the *Monthly Catalog of U.S. Government Publications* issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

The public may subscribe to either hardcover or microfiche versions of the DAILY REPORTs and JPRS publications through NTIS at the above address or by calling (703) 487-4630. Subscription rates will be provided by NTIS upon request. Subscriptions are available outside the United States from NTIS or appointed foreign dealers. New subscribers should expect a 30-day delay in receipt of the first issue.

U.S. Government offices may obtain subscriptions to the DAILY REPORTs or JPRS publications (hardcover or microfiche) at no charge through their sponsoring organizations. For additional information or assistance, call FBIS, (202) 338-6735,or write to P.O. Box 2604, Washington, D.C. 20013. Department of Defense consumers are required to submit requests through appropriate command validation channels to DIA, RTS-2C, Washington, D.C. 20301. (Telephone: (202) 373-3771, Autovon: 243-3771.)

Back issues or single copies of the DAILY REPORTs and JPRS publications are not available. Both the DAILY REPORTs and the JPRS publications are on file for public reference at the Library of Congress and at many Federal Depository Libraries. Reference copies may also be seen at many public and university libraries throughout the United States.